

University

THE MICHIGAN FARMER,

A WEEKLY JOURNAL OF AFFAIRS

Relating to the Farm, the Garden, and the Household.

NEW SERIES. DETROIT, SATURDAY, DECEMBER 8, 1860. VOL. 2., NO. 49.

The Michigan Farmer.
R. F. JOHNSTONE, EDITOR.
Publication Office, 130 Jefferson Avenue,
DETROIT MICHIGAN.

The MICHIGAN FARMER presents superior facilities to business men, publishers, manufacturers of Agricultural Implements, Nursery men, and stock breeders for advertising.

Terms of Advertisements.
Ten cents per line for each insertion when ordered for one month or less.

All orders with advertisements, should state the number of weeks the advertisement is to be published.

Subscription.
We will send one copy for \$2.00; three copies for \$5.00 five copies for \$8.00, and ten copies for \$15.00. No paper sent without the money in advance.

We will also send the FARMER, and the Atlantic Monthly, or Harper's Magazine to any address for \$4.00. Also the MICHIGAN FARMER and the Horticulturist or Hovey's Magazine of Horticulture to any address for \$3.50.

CONTENTS.	
THE FARM:	
Stacking Cornstalks.....	385
Russian Horses.....	385
The Garget and its Treatment.....	385
Cure of Corns on Horses Feet.....	385
The Gage Roller Drill.....	385
The Cheviot Sheep.....	385
Notes on New Varieties of plants.....	386
On the food of Horses.....	386
Broken Down.....	386
The Difficulties attending the Raising of Seedling Potatoes.....	386
THE GARDEN AND ORCHARD:	
The Ohio Beekeepers' Association.....	387
The Sorghum.....	387
Horticultural Notes: Blackberries and Raspberries—Fruit trees in Demand—Composition of Apples—Packing Apples in Leaves.....	387
Cultivation of Wild Flowers.....	387
EDITORIAL:	
Editorial Miscellany.....	388
Sustain your own Currency.....	388
The Currency.....	388
The President's Message.....	388
Literary and Scientific Notes.....	388
Political.....	388
The Meeting of Congress.....	389
Washington Gossip.....	389
HOUSEHOLD:	
Poetry: Impromptu Lines to an Absent Husband.....	390
"Hands and Minds".....	390
A Ten Days' Tour.....	390
The Water-Kelpie.....	390
The Rapids, St. Lawrence.....	390
"That Boy, Sidney".....	391
Enigmas and Answers.....	391
Markets.....	392

The Farm.

Stacking Corn Stalks.

Corn stalks when properly cured and cared for, form an important part of the farmer's means of wintering his stock. They are as good or better for milch cows than hay. Sheep also do well on them; hence it is well to consider the best means of using them to the best advantage with a view to the most profit.

If the corn is ripe when it is cut up, there is but little danger of the stalks becoming moldy. They should be dry when hauled and put in small stacks, not over two or three loads in a stack as when more are put in they are more likely to mold, and when they are being fed out there is more surface exposed to the rain and snow. But the place where to stack them is the main thing to be considered. Circumstances alter cases but other things being equal, I consider that the best place by far is the *barnyard*. Perhaps no one will dispute this, but the practice of nineteenth of our farmers contradict it. It is the habit of most farmers to stack their stalks on some knoll far away from the barn and visit the stack once or twice a day throughout the winter, or as long as the stalks last, to fodder them out. Example; novel (not new) style:

On a cold frosty morning in December may be seen a farmer with a pitch fork under his arm, with his hands in his pockets, cap drawn over his ears, and head inclined to the windward, steering towards his stacks half a mile distant, followed in Indian file by his hungry stock, the hinder cattle occasionally touching up the forward ones, causing them to break rank and halt, apparently wondering what they are going out there for.

As many as arrived at the stacks are fed, when the owner returns to be followed in half an

hour by his cattle, who prefer starving behind the barn to eating in the fierce winds. The common excuse for this practice is that it is so much labor to draw the stalks to the barn yard and draw the manure back again, but if the farmer counts his time in foddering it is believed the balance will be found the other way; to say nothing of the loss of manure dropped by the stock on their way to and from the stacks, and the destruction of the grass when, as is often the case, the feeding is done on pasture or meadow land. The advantages of feeding cornstalks in the barnyard are—1st, greater convenience and comfort of both feeder and cattle; 2d, a great saving of manure, as the stalks, after the leaves and husks are eaten off, absorb the liquid and mix with the other droppings, thus forming a large amount of excellent manure by spring. No fear need be entertained concerning the handling of it, as the constant tramping of the cattle will break up the stalks sufficient for that. But it is objected that the barnyard is not dry enough to fodder in. Then make it so. If there is earth enough within a mile of you, plow and scrape and draw till it is right, for if there is one place on the farm more than another that needs to be dry it is the barnyard. For the agricultural writers who say it should be dishing so as to hold the liquid manure. They never waded into one. Make it dry and fodder in it. There is no danger of having too much manure there. You can draw it out on the fields nearest the barn and let the fields more remote be enriched by pasturing, clover, &c. In regard to the right use of manure in raising wheat, perhaps I will send you a few thoughts at another time.

Observer.

Fairfield, Dec. 8, 1860.

Russian Horses.

[An English writer making some calculations on the number of horses in England, exclaims:]

But what is our limited stock of horses compared to the vast number in Russia, which, by their mortality, not only supply us with tons of horse-hides and horse hair, but also with those breakfast delicacies cloyed Russian "ox tongues," which never, however, adorned a bovine throat.

In 1851 there were more than 17,000,000 horses in the Russian empire: of these the greater number was to be found in the provinces of Oran (2,000,000) and Perm (700,000), where most of the inhabitants—who are of the Tartar race—have a peculiar inclination for horse-breeding; or the country of the Don Cossacks (400,000), where horsemanship is an indispensable part of the daily avocations of the people; and in the provinces of middle Russia, which require a great number of horses to carry on their extensive trade.

As far back as the historical accounts of Russia extend, the rearing of horses seems always to have formed a notable branch of the natural industry. The warlike and nomadic habits of the ancient population—the increasing demands for the supply of the numerous cavalry and artillery of a large army—the immense distances, requiring a large amount of animal labor, as well for the conveyance of produce and merchandise as for locomotion, all combined, have stimulated the development of this branch of rural economy, favored as it is over a large portion of the empire by the great extent of pasture-lands. Accordingly the Russians possess excellent horses for all uses. We need not particularize here the several varieties.

From a recent account we learn that the imperial studs at present are seven in number, namely, two in the government of Woreneje, four in that of Kharkow, and four in that of Nijini Novgorod. Being destined to raise stallions for different purposes, they have been arranged accordingly, and each of them has a type peculiar to itself. The Tchesmenka stud is a nursery of pure-blooded horses, and is divided into two sections, one devoted to English racers, and the other to Arabian.—The Khrenovoie stud is composed of three departments—saddle-horses of the old Orloff breed, uncrossed saddle-horses, and cross-breeds, including the Rostoptchine-breed

stallions; the Derkhoul stud for large-framed cuirassier horses; the Strelitz stud for light cavalry; the Novo Alexandroff stud for draft-horses of medium size; and the Pochinki stud for heavy draft horses of large size, and the ordinary farm horses of the country.—The rural horse depots, or private studs, are twenty-four in number, and serve twenty-nine governments. In 1850 they comprised 1,444 stallions, which in that year covered 25,189 mares, being an average of 17 or 18 for each stallion.

Among the agricultural horses of Russia, two classes are to be distinguished. The first, the common or indigenous breed, which possesses every proper quality, both as to strength and energy of temperament; but although it leaves nothing to be wished for in either of these respects, it is, unfortunately, at the present day, subject to degeneracy, in consequence of precocious copulation between animals only two or three years of age; and the other, an improved breed, has shown in numerous instances the advantages of crossing it with trotters.

The Garget and its Treatment.

By DR. GEO. H. DAVID, IN AM. STOCK JOURNAL.

INFLAMMATION OF THE UDDER IN COWS, COMMONLY KNOWN AS GARGET.

This is a very common complaint among cows, and it usually affects those that are in a fat or plethoric condition; therefore it is very important, in view of preventing this very prevalent malady, that proper attention be paid to the pregnant animal, in view of maintaining her general health. In the latter stages of pregnancy she only requires a sufficient quantity of food to preserve the integrity of her system, and nourish the fetus, within the womb; when more food than this is furnished, and the animal partakes of it, the superabundance serves to supply the adipose tissues with fat, and then it will be perceived that the cow is thriving a little too fast, which must be signal—the warning of nature—for us to dip a lighter hand into the meal-bag. A great proportion of the cases of garget that have come under my observation, were clearly traceable to errors in dietetics.

It is a fact, however, worthy of consideration, that some cows inherit a peculiarity of organism and predisposition to this disease, and therefore in spite of the very best management it may occasionally appear; yet even in this we may sometimes prevent an attack of garget by keeping the animal on a light diet, and furnishing a daily allowance of rock salt. This latter agent has a wonderful effect on the liver, stomach, and intestines, and preserves their integrity.

The pathology of garget in its early stage, is as follows: being a condition known as inflammation, it is accompanied by tumefaction, redness, heat and pain of the udder, and the milk, when drawn, is sometimes tinged with blood. In the next stage—and it often happens when the cow is of the lymphatic temperament—abscesses form in the substance of the walls of the udder, and this abscess may communicate with the cavity of one of the "four quarters" of the same; in such case, the function of the affected quarter is suspended, and finally becomes destroyed; yet a restoration of the function of the same often occurs at a subsequent calving.

Another pathological feature of this disease is that one or more quarters of the udder undergo a change in the structure; the walls of the same become both thickened and hardened; these conditions of the udder are termed by veterinarians "induration" (hardening), and "hypertrophy" (abnormal growth or enlargement), and now the contained milk coagulates and cannot be drawn off.

When this disease occurs in the breasts of the human female, the suppurative stage, viz., when abscesses are present, is known as "broken breast," and the states of induration, or hardening, and tumefaction, are termed by nurses "caked breasts,"—hence the term "caked udder."

Symptoms of Mammitis, or Inflammation of the Udder. Among the first symptoms noticed by the husbandman, are, loss of appetite—loss of cud—rumination is suspended;

the muzzle becomes dry, and the region at the root of the horns is increased in temperature—becomes hotter than other parts of the body; the hair looks unthrifty; the animal has a straddling gait—a very peculiar walk—and next the owner's attention is directed to the swollen udder, and he observes the noticeable fact, that whatever position she may assume, her attitude is not easily changed.

The above are the principal features of garget as it manifests itself among the bovines of this country. In Europe the disease sometimes assumes a very malignant form, and occasionally the services of a veterinary surgeon are required in view of "extirpating" or amputating the whole gland; such an operation, however, is occasionally performed; but the operation is ruin to the milch cow.

Treatment of Acute Garget, or Inflammation of the Udder.—In the early stages the udder should be fomented with tepid water, to which a small quantity of sulphuric ether may be added; the immediate effect of the same is to soothe, relax and soften the over distended gland, or udder, and when once in this condition we may possibly succeed in relieving the interior parts of the same, of the accumulated milk. This accumulated milk must always be thoroughly drawn, no matter whether the cow give much or little milk; whether she be on the eve of parturition, or in any other condition; the pain and irritation arising from over-distention of the udder, by the lacteal secretion, cannot be relieved unless the exciting cause be removed; hence the necessity of thorough milking.

Veterinarians contend that garget might, in a great measure, be obviated by keeping the animal, in the last stages of pregnancy, on a light diet, therefore, in addition to the above means, all cows, when under treatment for acute garget, must be fed with a "sparing hand."

Supposing the disease to be in the suppurative stage, and, on exploring the udder, it is evident that an abscess is forming, and a soft spot can be detected, a free opening should be made into the same, by means of a common thumb lancet; the matter must then be evacuated or squeezed out, and the orifice must be kept open so as to allow all accumulations of matter to pass off. In this stage of the disease I invariably administer tonics and stimulants, and generally with very happy results; the agents usually selected are goldenseed and ginger, in the following proportions:

Tincture of ginger, . . . 2 drachms,
Tincture of Golden Seed . . 4 drachms.
Mix, and administer from a small bottle. The above may be repeated if necessary, after a lapse of six hours; and so soon as the flow of matter ceases, the medicine may be discontinued.

Cure of Corns on Horses' Feet.—The cure of corns is very easily accomplished by the following plan: Don't cut out the corn, nor put spirits of salts on it, neither pare the heel down, so that the shoe will not touch it. It is of no use wherever, because in a few days the shoe will be hammered down on the corn, making it worse. All this weakens the heel. Take some tow dipped in tar, place it on the corn, and nail the shoe on over the tow, which lessens the jar on the corn. Put the shoe on with five nails, three on the outside, and two on the inner side. Perhaps some will say, oh! five nails won't hold the shoes on my horse's feet three days. All I have to say is, try it. In three weeks take the shoes off, and examine; if the corns are not gone, put on some more tow and tar, and in a few shoeings they will disappear without our injuring the foot by weakening the heel, as the other plan, paring and spirits of salts, assuredly does.—Weak heels, not having the shoe put on level, and with eight nails, thereby destroying the expansion of the foot, which keeps the foot healthy, and not keeping the foot soft, are the causes of corns. When you take off the shoe, notice how soft the place where the tar was. Is that not a reason for keeping the foot soft?—*Cor. of Country Gent.*

If a flock of geese see one of their number drink, they will drink too. Men often make geese of themselves.

The Gage Roller Drill.

[The Cass County Republican thus notes the operation of this excellent new machine invented by John S. Gage of Dowagiac:]

There was a drill, patented on the tenth day of July last, by John S. Gage of this place, which is so constructed, [that it presses the drill mark for the grain before it is deposited, and then covers it with loose earth, thus placing the seed in a condition similar to the English dibble. The lot which we visited in company with Mr. Gregory, Mr. G. C. Jones, and some other practical men, is on the farm of Archibald Jewell, a mile and a half north east of this place. The west third of the field was sowed with the Gage Roller drill—the middle third (with the exception of an acre or two on one end, sown broad cast,) was put in with a common tooth drill, manufactured at Springfield, Ohio. The east third was put in with the Gage Roller drill. The difference, at this time, in the appearance of the plants was from twenty-five to thirty per cent. in favor of the Roller drill. In this opinion, all present were agreed. Mr. Jewell, who is thought to be one of the most practically scientific farmers in this part of the State, gave, as his opinion, that the great difference, in appearance, in favor of the wheat put in by the roller drill was owing entirely to the compression of earth by the action of this drill at the time of planting the seed. We noticed in passing over this field, that in that portion of it sown broad cast, as also in that put in by the Ohio drill, the earth was mellow, leaving deep foot prints wherever we passed; but, that on the part put in by the Roller drill, it was firm and even to the tread. For ourself we think the opinion of Mr. Jewell correct in regard to the matter above stated; and from present appearance we should judge that the wheat put in with the Roller drill, would yield at least twenty-two per cent. more at harvest than that on the other parts of the field. We would like to learn from the Farmer's Club of New York City whether any reports have been sent in, in reference to the use of the roller after seeding, and if so what were the results. Farmers go and look at the several pieces of wheat, we have described, for yourselves, and receive instruction. The Roller drill spoken of above is manufactured by P. D. Beekwith, of this village.

The Cheviot Sheep.

[The Homestead notices that recently some pure blood Cheviot sheep have been introduced into Connecticut, from Delaware county, New York, where this breed of sheep has been kept for some years. The Cheviot sheep is a native of the district of the Cheviot Hills, in the south of Scotland, and north of England:]

They are hornless, the heads bare; faces white, though grayish or dun spots do not indicate essential impurity; the carcass is well formed, long, and the objection which the books urge, that the chest is neither deep nor broad enough, seems to have been to a great degree done away by careful breeding; certainly the buck above mentioned had as good a chest as we desire to see. Their underpinning is fine and clean, woolled down to the hock. There is a clashing of testimony in regard to their roaming disposition, doubtless they are more inclined to do so than the Cotswolds. The breeders in New York claim that they are quiet and easily fenced and controlled. Stephens says that their disposition is a little suspicious with an inclination to roam, which renders them unkindly to feed at an early age. However this may be it is no uncommon thing to find grade lambs in September and October weighing one hundred to one hundred and thirty pounds, and Mr. Elliott tells us that the man of whom he bought his ewes killed a lamb about the last of September, the quarters weighing fifty-seven pounds. The flesh is fine grained, well marbled, and in universal esteem. The wool is finer than the long-wool of the Leicester and kindred breeds, and both in length and quality is much like that of the South Downs, so that they are classed with them as *middle-wools*. The bucks shear eight to twelve pounds, and ewes four to eight. The price paid for breeding animals is \$20 to \$40 for good bucks, and half as much for ewes. The breed is extending considerably in the southern-central counties of New York, particularly in Otsego.

Notes on New Varieties of Plants.

EDITOR MICHIGAN FARMER—Dear Sir: I have taken the liberty to forward you by railroad to-day a barrel containing specimens of some of the leading products of my little farm which you are at liberty to dispose of according to your taste. My object being to show you that, amid the pleasures of the lake and the toils of the landing, I have not been entirely neglectful of my favorite pursuit—that of propagating and testing new varieties of grain, vegetables and seeds. Among the specimens forwarded are—first,

Tooker's Wheat—This new variety, an imperfect sample of which I sent you last summer, is in reality white, although like all other varieties of white wheat, it often produces heads containing berries of a reddish cast. During the fall of 1853, I sowed five different varieties of wheat, namely: Soule's, Blue-stem, Flint, Mediterranean, and Australian. The insects and hard winter so injured the whole crop that it hardly paid for harvesting, but where the Australian should have been was here and there a stool of a new kind that stood out in "bold relief" full five feet high, with beautiful heads of grain, well filled. It pleased me so much that I saved a handful of it and sowed it by itself, and have continued to raise it ever since, preferring it to all other varieties on account of its remarkable tendency to withstand insects and hard winters.

Rhode Island Premium Corn—Among the different varieties of corn I have tried, none pleases me so well as the one above named. Its merits are—early maturity, small stalks well filled with ears, small cob beautifully filled out with good sound grain, it weighs heavy, makes excellent bread, and is a sure crop. The farmers of our northern counties should have this corn by all means; and I will say to those living beyond the reach of railroads and express that I will distribute packages of this corn by mail among our northern brethren on receipt of stamps to pay the postage.

Hungarian Grass or Millet—This I find to be a good crop for hay as well as grain. It requires a rich soil to do well, but on the whole it is a surer crop than oats here.

Egyptian Millet—This is deserving of more than a passing notice. When thinly sown on good land it will grow five feet high and produce heads a foot long. It is a good crop to raise for horses and milch cows, fed to them when green. I find it an excellent substitute for clover. When sown a half bushel of seed to the acre in June, it makes a splendid growth of green manure to plow under for wheat in the fall; this saves the labor of a summer fallow and the time required to raise a crop of clover for the same purpose.

Potatoes—That little gem, the Mexican, is still my favorite for baking, and should be found in every kitchen garden, though for a field crop they are not quite large enough to be profitable except as a baking potato to those who know their true merits. The California, sometimes called Jenny Linds, are the giants of the whole potato family. They excel all others for size and yield. Though rough looking, they are by no means a bad potato for the table. They are par-colored—pink and white—sometimes producing tubers perfectly white. I shall propagate the latter as they sell best in market. They are decidedly a greater yielder. The new peach blow seedling is a beautiful round potato with particolored skin and white flesh; a good yielder and excellent for the table. The Fox-ite or Fox seedling is an excellent potato and early; but as an extra early potato I prefer the Early Shaw. The Sweet Mercer is the original Mercer potato of New York improved by continual planting on sandy soil, though similar to the Meshannock they are far superior in quality. All the above named potatoes are entirely free from the rot as far as my experience with them goes.

Carrots should be more extensively raised. The are excellent feed for horses and all kinds of stock. I raise the French White Carrot. They are easily cultivated and more easily harvested than other kinds, being short rooted and easily pulled by hand. I got at the rate of six bushels to the square rod or 960 bushels to the acre.

White Russia Turnip or White Rutabaga is by far the best of all the turnip or baga family, being early or late according to time of planting, and always sweet and tender. Their handsome shape and pure white flesh always commend them in market as well as at the table. They are profitable also to raise for stock.

Squashes—I trust I shall be pardoned when I say that Tooker's Premium Squash has no equal as a winter or autumnal for pie, and if Mr. Johnstone does not find the spec-

men I have sent him, heavy, solid, fine grained, very sweet, and a beauty every way, I hope he will not be backward in saying so. This variety I obtained by planting several choice varieties together, and propagating from the best specimen of their product.

Sweet Corn—Five years ago, I planted five different varieties of sweet corn together. They amalgamated and produced a variety possessing all the desirable qualities of a superb article. It is large, early, productive, very sweet, remains green a long time; is excellent for the table when green, or when dried for winter use. All who have had seed of me are high in its praise. I have ears of this corn by me now that measure one foot three inches in length. I made a beautiful article of syrup from the stalks of this corn this fall, and shall plant half an acre next season expressly for syrup. The accompanying package of the corn is dried for winter use; please try it. I call it Tooker's Excelsior Sweet Corn.

Sorghum—The specimen of sorgho syrup which I send you is a fair average sample of what I make from unripe cane by my peculiar mode of boiling. I have made much better from ripe cane such as we did not have this season. The cultivation of the Sorgho or Chinese Sugar Cane and its manufacture into syrup has become a permanent institution in this part of the State, much to the chagrin of our merchant speculators in foreign sweets, who are doing their best to discountenance it; but I trust the farmers of Michigan are not so blind to their own interests as to neglect so important a branch of agricultural domestic economy. Last season, I made nearly one thousand gallons of Sorgho syrup for myself and neighbors, and about 200 this season, the crop being light and but little planted. I estimate the yield of syrup within a range of ten miles of my place this year and last, at ten thousand gallons, and am inclined to think it will more than double that amount next season. I should like to say something on the cultivation of the Sorgho and its manufacture into syrup, as I have learned it by my past four years' experience in the business, but my space will not admit of it now.

Respectfully,
D. D. TOOKER.
Napoleon, Michigan, Nov., 1860.

On the Food of Horses.

[M. J. Magne, Professor of Agriculture in the Imperial Veterinary School of Alfort, France, in an article on the nutritive properties of food for horses and cattle, makes the following remarks:]

It is well known, since the time of Lavoisier, that respiration uses up the carbon and hydrogen contained in the food, thus becoming the source of animal heat; also that the consumption of these bodies, considered either in the different breeds or in each particular animal, in a state of health or disease, and when at rest or in motion, is always in proportion to the activity of the respiration. It is under the influence of strong exercise that the large amount of carbon which is contained in meadow hay and oats is appropriated. M. H. Bouley and Lassagne have found that the loss of carbon during rest is 2,200 grammes, and 4800 when in exercise, in twenty-four hours; and other chemists have come to the same conclusion. M. Alibert admits in his learned memoir on alimentation, that the loss of carbon in twenty-four hours, in a horse weighing 500 kilogr., amounts to 2400 gr. during repose. To appreciate the influence of exercise, he has experimented on man. A man raised a weight of 10 kilogr. to the height of one metre from the ground without letting it fall, and lost carbon at the rate of 58 gr. .068 in the hour. The same individual, on getting out of bed in the morning, and before having taken any exercise, emitted carbon at the rate of 10 gr. 840 in the hour. The experiment lasted ten minutes. The weight was lifted five times, the exertion being very considerable, and the man was in a violent perspiration. During this experiment, which was made with the greatest care, the consumption of carbon was five times greater than when in a state of rest. In an old horse the respiration became increased from 12 and 13 to 27 and 28, during work; in a mare from 16 and 17 to 44 and 46; in a gelding from 17 and 18 to 36 and 40, after half an hour's trotting. The first two were worked at the plow at the end of January, the weather being rather cold; the last was ridden by a man of ordinary weight, at the beginning of April, the weather being mild. From this it will be seen, that the respiration is nearly tripled during exercise. The expiration of carbonic acid is not increased in proportion to the number of respirations. If the quantity be 4—1 per cent. in 12 respirations per minute, it is only 3—3 per cent. in 24 respirations, and only 2—9 in 48; but al-

though the quantity is less in each expiration, the total in a given time is more when the respiration is accelerated.

The hydrogen contained in the food, like the carbon, is consumed during respiration and forms water, which is exhaled by the tissues and cannot be easily estimated. The loss of carbon by respiration is variable, and in proportion to the more or less rapid exercise and its duration, and without exaggeration it might be taken at one-third more; as, for instance, a horse that emits 2400 gr. in 24 hours in the stable, would lose at work 100 gr. more per hour, and taking 10 hours' work would be 1 kilogr. These 8400 gr. correspond to the quantity contained in the food, the ration being composed of 7 kilogr. of oats, and 7—500 of hay. We know that these carbonaceous substances contain .176 per cent of carbon, and the neutral bodies, as starch and sugar, contain 54 per cent.

Post horses which work only a few hours a day consume more carbon than horses at slow work, working 10 hours a day. The latter do well on rations that contain less carbon than the former. On the other hand, horses that have to undergo violent exercise, lose flesh very fast, although the exercise be but of short duration. Such is the case with race horses when training. The question may be asked, whether all the functions are not equally increased by exercise, and the loss of nitrogen and the phosphorus be not increased also. The answer to this, they are not all equally increased by exercise; on the contrary, some are decreased; as, for instance, the secretion of milk, the urine, and the semen. A horse that perspires much loses less, and consequently loses less nitrogen and phosphorus by the kidneys. It is true, that during rapid progression, and necessarily accelerated respiration, accompanied by abundant perspiration, the action of the kidneys is lessened, for the skin then emits a certain amount of nitrogen and other mineral substances; but this does not establish the balance, for at the same time the skin also gives off a quantity of gaseous matter, amongst which carbonic acid forms a large item; but this acid is partly derived from the action of the oxygen of the air on the carbon of the blood. The inference from these considerations is, that animals lose more carbon and less nitrogen when at work than when at rest, and hence a large quantity of carbonaceous substances are necessary in their food to supply the loss.

In the experiments made on cavalry horses, it was found that the substitution of barley for oats was less detrimental to the light cavalry horses than to the large horses of the heavy cavalry. In the East, barley suffices to keep horses in good condition, while oats cause in hot countries, at times, serious inconvenience to them, generally rendering them too vigorous, even when given only in quantities which would be insufficient to sustain horses in cold countries. In America, horses are fed on maize and straw. In France, Spain, and Italy, maize is frequently substituted for oats. In Provence, horses and mules are fed on barley and straw. It is a general opinion, and a well founded one, that to render horses vigorous, they must be fed oats, no other grain can be compared with it. The following is the composition of some of the cereals:

Oats	Carbon.	Nitrogen.
Barley	824	100
Buckwheat	168	100
Barley	152	100
Rye	95	100
Wheat	56	100
Beans	42	100

In meadow hay, and the leguminosae, the proportions are, carbon 330 to nitrogen 100.

Lucerne	Carbon.	Nitrogen.
Clover	182	100
	182	100

It would be a difficult task to ascertain the exact quantity of carbon and nitrogen required by the herbivora, but they all do well on rations consisting of meadow hay and oats, while horses are enabled by this food to do the greatest amount of hard work; and moreover, they never get tired of such diet. We may therefore take it as the standard of what the diet of horses should consist.

It is important, in the substitution of one kind of provender for another, to study the chemical composition of each, so as to provide animals with those elements which are necessary to their constitution, and to the work they have to perform. Nor can it be questioned that many diseases, the causes of which are at present unknown, are produced by the food, and consequently a knowledge of the chemical constitution of the alimentary substances is of very great interest.

Broken Down—Congaree, the horse that ran with Planet for the \$20,000 stake last September, has finally broken down. It is stated that his lameness was apparent before he ran that great four mile race.

The Difficulties attending the Raising of Seedling Potatoes.

[David Moore, the curator of the Royal Dublin Society's Garden at Glasnevin, Ireland, in an address before the Society, thus referred to some of the difficulties connected with the originating of new varieties of that important vegetable, the Potato:]

It will be in the recollection of some of the gentlemen present who attend more especially to agricultural matters, that during the first years of the potatoe disease a theory was advanced as the cause of that mysterious malady, which found favor with many at the time, namely, that the stock from which the seed was then produced had become worn-out through age and continued subdivision of the tubers. This led to the growing of seedlings by many persons as a panacea for the evils we were threatened with, they considering that if a fresh stock, with "new blood," as they called it, were once more established to procure seed from, the plant would be able in consequence, to withstand the disease as well as it had previously done. Others, who did not believe in this theory, grew seedlings also, for the purpose of disproving it. Through both sources a large number of seedlings were consequently brought under cultivation in the Botanic Garden, by way of experiment, some of which were grown there from the seeds, and more were sent by gentlemen who raised them elsewhere, among whom I may particularly mention the name of John Anderson, Esq., Fermoy, county of Cork, who alone sent 115 kinds in March, 1853, of which we still grow about 60 distinct varieties. As I have already reported on some of those experiments, in so far as having found that seedlings are fully as liable to be affected with the disease as most of the old sorts, I need not refer to them farther, it being now a well known fact to all who have fairly proved the matter. I even went a step beyond that of seedlings, and had some of the tubers of the original stock sent from South America, which were very early and virulently attacked the same year they were planted, though they were kept apart from other potatoes; thus clearly proving that the disease was not the consequence of a worn-out stock.

So far, nothing more was proved than negating the theory; but, in following up the experiments, results of another kind were obtained, which are of more public importance. During the first year of those seedlings the crops were light, tubers small, and quality bad; consequently they were only grown for the purpose of trying whether, as they advanced in age, they would become better able to resist the disease. Great care was, however, bestowed on their cultivation by Mr. M'Arde, the foreman who had charge of them, and yearly we had the satisfaction of seeing them improve in produce as well as in quality. In the early stages of their growth they were solid after being boiled, waxy and unpleasantly flavored; and on cutting a slice from the tubers sufficiently thin for examination under the microscope, it could be seen that the starch granules were comparatively few in the mass, and not well developed, as I several times observed when looking for the mycelium of the fungus among the cells. This will go far to account for the soft, waxy state of the seedlings at first, as well as for their not bursting their skins, as properly matured tubers do when their chemical constituents are fully developed. The unpleasant flavor continued as long as the tubers were soft; but so soon as they became floury and burst in boiling, the taste improved, and some are now equal to, if not better than, many of our old sorts. I sent 44 samples of the best kinds to the late exhibition, where they might have been seen on the stand near the middle gate, on entering the court-yard, without any notice attached of the source they came from. It required ten years cultivation to bring those samples to the state of perfection which they were exhibited in, during which period they continued to improve gradually every subsequent year; and that is one of the principal facts I have to state in connection with this subject, which, simple though it may appear, and no doubt it is, when known; like most other things, it yet contains the principle of managing seedlings to a successful issue. Here we have carefully made experiments, showing that no small amount of patience and perseverance ought to be exercised with seedling potatoes before they are given up as worthless; and further, that such is really necessary to prove them.

The brief history I have given of those plants is applicable to all seedling potatoes. They are naturally soft and waxy at first, which is, unquestionably, one of the reasons why we see so few good seedlings brought extensively under cultivation to take

the places of inferior sorts. Their culture is nine cases out of ten, abandoned before their merits are properly ascertained, and no doubt many valuable kinds have, in consequence, been lost. In proof of this, I may ask, where now are the immense quantity of seedlings which were raised in the year 1851, and three following years? What has become of the many samples of seedlings exhibited year after year at the Royal Dublin Society's annual exhibition of agricultural produce? Assuredly, they are not to be seen in our markets; and, judging from the samples of potatoes sent to the late show, I must say that neither my brother-judges nor I considered there was any great improvement in that department. It is, therefore, to be feared that in most cases their culture has not been persevered in as was necessary, which is much to be regretted, because in none of our root crops is there more room for improvement, nor in any are the means for such more at command.

We shall now briefly notice the next topic of importance in the raising of seedlings, whether potatoes or other vegetables, namely, the means to be used in order to obtain desirable results. I have stated that more than one hundred kinds of potatoes have been grown in the Botanic Garden from seed, and half of them brought to a state in which they can be cultivated safely as crops of that vegetable; yet I doubt whether much good has been done to the cause of agriculture in consequence. None of the sorts yet exceed in quality that of our best kinds already under cultivation; but some of them are very prolific, and show a degree of vigor and freshness which prove that there is something in the "new blood" after all. The inferiority in kind has, no doubt, to a considerable extent, been caused by want of proper means having been taken in procuring the seeds; and similar results will continue to show themselves until the raising and growing of seedlings be conducted on rational and physiological principles. At present, for the most part, the operations are managed in a most empirical manner, simply by chance or luck, as some say. The apples containing the seeds are collected when ripe, from any variety, kept during the winter, and sown the ensuing spring. Nothing can be more easy than this, although it be a process by which thousands of seedlings may be raised annually, each differing from the other in some slight degree. But this is not what is wanted, neither is it the way to go to work in order to obtain improved varieties. To be a successful operator, one must understand fully what he seeks to obtain, as well as something of the organs of plants, and the functions they perform. If these matters be lost sight of, very little real improvement can be effected—it being a well known fact that seedlings raised from varieties of such plants as the potato, will not resemble the parent plant in one third their number, if any be exactly like it. Let us suppose a case, for example, that one hundred seedlings are produced from the well known Kemp potato; the chances are that not one half of them will be Kemps, or have much resemblance to them. Some will very likely be even red skinned, or have deep hollow eyes, be smooth, and have different colored blossoms from the true Kemp. But suppose another case—that the blossoms of a kidney potato have been crossed artificially with those of the Kemp, and one hundred plants raised from the crossed seeds; one-third of these, at least, will be of an intermediate form with the two kinds, if not nearly all. Or, if a late sort be crossed with one that is earlier, the prevailing portion of the seedlings raised will ripen at a different period of the season from either of the present plants. In this manner we proceed on well-known physiological laws, which are under our control, and sure to produce tolerably certain results. But further, seedlings may be much improved without resorting to cross-breeding, if due attention be paid in selecting seeds from sorts possessing some peculiar merits of excellence. Although I have stated that a large portion of the produce will depart from bearing much resemblance to the parent or parents, yet some will adhere closely to them, and possess their good or bad qualities, as the case may be, in a greater degree than the parents themselves. It is, therefore of much importance to be careful to grow only seeds taken from good sorts.—To be able to reason properly, and act accordingly, are the chief requirements necessary to ensure success.

The Burlington (Vt.) Free Press, referring to the fine weather prevailing in that locality, acknowledges the receipt of plump ripe strawberries, plucked in an open field on Friday, 23d November.

The Hossian fly has shown itself in the wheat of Platt county, Illinois.

The Garden & Orchard.

The Ohio Beekeepers' Association.

The Beekeepers' Association met at Cleveland on the 22d of last month. The full proceedings are published in the *Ohio Farmer*, and from this report we make some extracts this week.

The first business before the Association was a statement by the president, Dr. Kirtland, who took the occasion to contradict some errors stated by Mr. Flanders. The Association had never received any Italian Bees. Dr. Kirtland had the bees as his private property, but the Association never had had any. The Doctor denied also very emphatically that he had ever given any recommendation of the Flanders Beehive, as had been advertised by Mr. Flanders.

The next subject brought before the Association was—

What is the Best Method of Wintering Bees?

Prof. Kirtland remarked, that various plans had been suggested, and he tried many of them. Certain conditions are necessary to success. First—a good supply of food.—Second—ventilation sufficient to take away all the warm emanations that accumulate, for these are like those from the human system, and would, if allowed to remain, do injury.—Third—proper temperature. This is the rub. Some say at a very low temperature, they require less food. Others think they eat less when kept at a high temperature. With the higher orders of animals, the colder the atmosphere to which they are exposed, the more food they require. A few years ago, during one of the cold winters which we have, he exposed a swarm of bees in a very open hive hung on a limb of an apple tree, and it came out strong, and made one of his best swarms. Two years ago he had some weak swarms, which he turned up, covered with a sheet, placed comb and honey for them to eat, and found in the spring they had increased very much in weight, and by fall they were as good as any of his swarms. In the first case, cold seemed to prove a good condition for them, but in this case he thought warmth better.—Last winter he had forty-four colonies scattered about in his orchard with no protection, and his bees never did better. He never buried bees, but knew a man that kept them in an open cellar, and had the reputation of losing few or none. The temperature of the cellar was about freezing point. This winter I have placed twenty-two colonies in a cellar, at as high temperature as I can command.

Mr. Sturtevant said, that no man knows the best plan, but by comparison of views we may make some progress. No amount of freezing will kill bees, if they are kept dry; that is, if the moisture that accumulates be allowed to pass off. He had a fact from a man on whom he could depend, of a swarm kept all winter at a temperature of 46 deg., fed with honey, and furnished with rye-flour and water. By the 4th of May they sent off a large swarm. This fact is in favor of a warm position. Bees may be buried where the winters are uniform and cold, but where we have sudden changes and frequent warm spells, it will not answer. If it is warm, bees should be allowed to go out in the winter to void their excrements, or they will become diseased.

J. Kirkpatrick said, that the theory of Liebig applied more particularly to the animals usually called warm-blooded. When an animal is slow and intermittent, and the circulation very slow. In this condition, no food is taken or needed. Insects generally do not feed during winter, but merely secure themselves in some way or other from the action of the elements. Bees, if torpid, need no food, and the question in his opinion, resolves itself into whether it is more profitable to keep the bees warm and feed them, and thus secure early swarms, or to keep them cold, with the opposite result.

Prof. Kirtland remarked that ventilation is the great point to ensure success in wintering bees, and that this has not received the attention it deserves.

E. T. Sturtevant said that upper ventilation was, in his opinion, the best means of securing successful wintering. In Langstroth's, or movable comb hives, they would close the lower entrance, entirely removing the tins from the honey-board.

S. C. Brown, buried some swarms last winter; has found that whenever a swarm had a good supply of bees, combs and honey, it was always in good condition in the spring; ventilation is necessary. The swarms he placed in a room, did well, although many bees died. Those he buried in the fall, when examined in the spring were in fine condition; but in two weeks after they were taken up,

seemed to have lost half their bees. Would not bury when a swarm has plenty of bees and honey, but in other cases would do so, and read the following letter from Mr. Samuel Wagner, of York, Pa.:

"Your favor of the 6th inst. was duly received. The suggestion of the use of slate for condensing moisture in hives, for the benefit of bees in winter, was made by me in the course of some correspondence I had with Mr. Langstroth, with reference to an article published by Berlepsch & Eberhart, in the *Bienenzeitung*, the substance of which is given in Mr. Langstroth's book. But I never tried the slate, because I never observed that there was any deficiency of moisture in the Langstroth hive in winter, but rather an excess of it; to get rid of which, I resorted to upward ventilation, by removing the covers of one or more of the holes in the honey-board. The *Dzierzon* hive, with which Berlepsch & Eberhart operate, and on which their observations were made, is constructed differently from the Langstroth. Instead of moveable top and honey board for the introduction and removal of frames, &c., the rear end of the hive is opened and closed by a door; this door must necessarily be somewhat loosely fitted, and with all the care used in adjusting it for winter, there will in most cases be sufficient interstices remaining to permit most of the internal moisture, and much of the heat to escape; which ultimately results in the production of water-dearth, if the winter be severe and protracted, and the bees consequently long confined. During that part of the winter when the bees are inactive and without brood, they require very little air or water; but with the reviving energy and activity of the stock, and the consequent production of brood, comes on immediately an increased demand and imperative necessity for greater supplies of both these elements. The air needed, gradually flows in through the entrance of the hive; but at that season it is not usually charged with much moisture; and if the moisture, which by transpiration emanated from the body of the cluster, has from the construction of the hive had an opportunity to escape almost *en masse*, the bees will soon begin to suffer from the want of water, especially if they have brood to nurse. If, from the adverse state of the weather, they cannot then fly out to procure supplies, and their want be not otherwise seasonably provided for, the brood must perish, and many of the bees likewise, despite of their efforts to sustain themselves by a more lavish consumption of honey.

"This I conceive to be, in brief, the main reason why the *Dzierzon* hive has been complained of, according to *Dzierzon* himself, as being *too dry* in winter. The Langstroth hive being differently constructed, is not obnoxious to this charge; but on the contrary, where proper precautions are not used, is liable to become *too damp* for the bees; and upward ventilation judiciously employed, has been found to be an effectual remedy or preventive. I now use a frame two inches broad, and one inch thick, of such length and breadth as to fit it precisely to the top of the brooding apartment; cover it with coarse toweling or canvas, insert it in the fall, between the honey board and the top of the brooding chamber, and retain it there during the winter, removing the tins from the holes in the honey-board. This permits the excess of moisture to escape with slow but sufficient ventilation. About the first of February, I replace the tins on the front range of holes; about the first of March, I replace those on the second range, and about the first of April I replace the remainder. If any feeding seems necessary during the winter, I place candy over the clustered bees, laying it across the comb frames, below the canvassed frame; and close those holes in the honey-board, which are directly, or nearly so, above the candy. Instead of inserting a piece of slate in the lower side of the honey-board, I give a portion of that side of the board two or three coats of varnish, so as to prevent that part of the board from absorbing the moisture; which, condensing on the varnished surface, will drop on and be retained by the canvas, where the bees can have access to it if needed. I have found this a convenient and efficient mode of wintering bees in the open air, when stocks are in a fair condition.

"I never tried wintering in clamps or cellars, as I have not been situated so as to be able to avail myself of either mode; but am inclined to think that with due care, and after some practice and experience, bees could be more advantageously wintered in that manner than in any other, in a climate so variable as ours. German apianians unanimously consider successful wintering the 'masterpiece in bee culture' in their country; and it may, with equal truth, be so regarded here.

Dr. Kirtland says burying bees has been

practised in parts of New England, generally with good results.

S. C. Brown said we did not follow nature in many things respecting our domestic animals. If bees wintered best buried, let us bury them. He believes it will succeed well, if well done. Do not bury moisture with them; bury on a dry day, in a dry situation.

J. W. Fessenden said bee-keepers should not rob their swarms. If they have not enough food, return some of the honey previously taken. He has given candy as food during winter with good results, using the common candy of the shops. Good ventilation is necessary.

L. S. Brown remarked, that in his opinion, bees should have enough honey, but no more. Hives that have their combs nearly empty at the beginning of the honey harvest, do best. Prefers smallish hives, both for wintering, and the production of spare honey and new swarms.

What is the Best Mode to Prevent Bees Robbing?

was the second question before the Association.

A. Armstrong has had a great deal of trouble with his bees from this cause this season. Has not succeeded in stopping robbing, even when the assailing swarm had the honey board removed and the frames disturbed.

A. K. Smith has lost many swarms, and thinks that the cause is owing to some deficiency in the robbed hive. Usually a deficiency in queens, or the hive overrun with moths.

E. T. Sturtevant's bees do not rob strong swarms, but weak ones, for some cause. Moths let strong swarms alone. Can always stop swarms from robbing. Bees that come out very early are those that are most liable to rob, and the entrance of such hives should be closed, so that one bee alone can issue at a time.

Mr. Kirkpatrick's experience in robbing differs somewhat from others. Two of his strongest swarms began fighting, one to rob the other. He dusted flour on the combatants, and found the hive to which they belonged; closed the entrances, so as to admit but one bee at a time, and cut the caps from the honey-combs; then sprinkled the bees outside with water. In five minutes all was quiet.

J. W. Fessenden said that his experience agrees with Mr. K.'s and that to general rules there were often exceptions. One of his strongest swarms commenced to rob one equally strong; he stopped them in the same manner as the former speaker; used alcohol mixed with water to cool them off with.

Prof. Kirtland considered this a very interesting subject; was pleased with the views of Messrs. Sturtevant and Smith, but has had some experience the past season that was somewhat opposed to them: had a small swarm with an Italian queen, that was untouched by robbers until a ter the queen had hatched, but ever since that the other bees have attacked this swarm, but have been able to resist these attacks, and yet this hive is in good condition, with a fertile queen. The loss of queens is doubtless the greatest cause of robbing. Has used water in cooling off bees with a tendency to robbing. Weak or diseased swarms are those generally attacked, but sometimes strong ones are assailed.

W. A. Flanders remarked, that taking the queen out of the assailing hive and caging her, will stop robbing. Feeding the robbers will also stop them.

Mr. Fessenden asked if any of the members had tried sprinkling with peppermint water.

Mr. Kirkpatrick could not understand why bees sprinkled with a vegetable odor should be set upon by their fellows, when every time they go out they come in contact with some odorous plant.

Mr. Sturtevant said that he would never be at the trouble of hunting up the queen, as recommended by Mr. Flanders; it was too troublesome; closing the entrance is generally sufficient to stop robbers.

The Sorgho.

BY A PRACTICAL MAN.

MR. EDITOR—Sir: Much has been said about the Chinese Sugar Cane. Many and varied are the opinions concerning it. Some pronounce it a failure and not adapted to our climate; others not so easily discouraged, say that the experiment has not been fully tried, that there is something about the culture and manufacturing of it which has not yet been found out.

Now I think that the Sorgho is neither a failure nor a mystery, and to substantiate my opinion I propose in a plain, blunt, farmer style, to relate my experience in the matter, and if you deem it worthy of a place in your columns, please insert it, and if not throw it

aside, and excuse the impertinence of a novice in literary productions.

I will first say a word about the culture of the Sorgho. A sandy soil is best adapted to its growth, although it will do very well on any soil and in any climate where corn will grow and mature. The ground should be dry and rich, and situated so as to receive directly the rays of the sun; it should be prepared as for corn, made mellow and clean, and when this is done let the seed be soaked in lukewarm water until it is sprouted, and put in the ground as soon as it is in a condition to receive seed—the earlier the better. Some are of the opinion that because it grows so slow when planted early, it should not be planted till late, say the first of June. It should be planted as early as the middle of May, and although it will not shoot up rapidly at first, it will be taking root, so that when the warm weather comes it will grow with great rapidity; and by the middle of September, if it has the chances of an ordinary season, it will have attained sufficient maturity to produce an article of syrup not to be surpassed by anything brought from a southern market.

Now comes the rub. Any good farmer can raise good Sugar Cane; there is nothing difficult about it, and it requires no more science than it does to raise a good crop of corn; but it does require some science to take care of it and manufacture a good article of syrup from it after it is raised.

In the first place it should not be allowed to freeze on the hill, but it should be cut up before there are any frosts sufficient to injure the stalk, and if convenient worked, if not set up in a barn or under a shed, in such a manner as to allow a free circulation of air through it. It is not essential that the leaves should be stripped from it before putting it away in this manner, but if they are not, great care should be taken that it does not heat or mould. If taken care of in this way it will keep a long time, or until there are frosts sufficient to freeze the juice in the stalk, which requires a very hard frost.

The most difficult part of the whole matter is the manufacturing of good syrup from the Sorgho, and of this and the profits arising therefrom I propose to speak at another time.

Raisin, Lenawee Co., Mich.

MARK.

HORTICULTURAL NOTES.

Blackberries and Raspberries.

During the last five years, the editor of the Connecticut *Homestead* has tried the Lawton, Dorchester and Newman's thornless blackberries, and the Hudson River red raspberry, and now says, "anybody is welcome to our plants who will be at the trouble to take them up."

Fruit Trees in Demand.

The Holland *Register* states that Mr. Elliott, an agent for the sale of fruit trees, disposed of over 10,000 trees this fall at Newark and Allegan. Mr. Mann, another agent, has sold some 2,600 trees here, besides what our local nurseries have supplied. Fruit will become one of the most important exports from the Black River country, which is admirably adapted to its growth.

Composition of Apples.

Every one will understand that the various sorts of apples differ much in composition, yet, in an average condition, 100 pounds of fresh apples contain about 3.2 pounds of fiber, 0.2 gluten, fat and wax, 0.16 of casein, 1.4 of albumen, 3.1 of dextrine, 8.3 of sugar, 0.3 of malic acid, 82.66 of water. Besides the above mentioned elements, the apple contains a small quantity of tannic and gallic acid, most in the russets. To these acids, apples owe their astringency of taste, and the blackening of iron or steel instruments used to cut them. The percentage of ash in the apple is small, yet it is rich in phosphoric and sulphuric acids, potash and soda. The dry matter of melons contains quite a large percentage of albumen, casein, sugar, and dextrine, with a small quantity of acid.

Packing Apples in Leaves.

A few years ago, Mr. J. W. Boynton, of East Hartford, while gathering up leaves under an apple tree, in the spring, observed beneath them a few fresh, unfrozen apples.—It suggested at once that dry leaves would answer well as packing material for fruit, and the next fall and every season since he has used them for this purpose. We saw a few days ago some specimens thus preserved, seemingly as fresh and as piquant in flavor as when first gathered; yet he assured us they were varieties that would have decayed months ago if unprotected. His plan is to pick the apples carefully at the proper time, not to pack them until the forest leaves are perfectly dry and the weather quite cool. Then the apples and leaves are placed in alternate layers, and the last layer of leaves crowded in as close as

possible by placing any convenient weight on the cover of the barrel. The leaves are of such elasticity that the whole may be compressed so tightly as to prevent all shucking, &c., and yet not bruise the apples in the slightest degree. In this latitude Mr. Boynton has never found it necessary to keep these barrels of fruit in any place warmer than an open shed. It would be advisable of course, everywhere, to keep them in as cool a place as possible. In the spring they are to be removed to a cool, airy cellar, or to an apartment especially for fruit, in connection with the ice-houses.—*Homestead*.

Cultivation of Wild Flowers.

BY G. M. BEMENT, IN HORTICULTURIST.

To those interested in floriculture, we recommend, for the advancement of their gardens, one great storehouse of beauty, viz., the woods and fields, with their wealth of uncultivated blossoms. It is in the power of almost every one to draw from this source, and, such is the perversity of human nature, perhaps on this very account the opportunity is neglected. While various flowers, neither graceful nor fragrant, are admitted into the limited precincts of a garden, because perhaps, they are rare, of difficult growth, or foreign extraction, many a wild sweet native of our own hills and valleys would be altogether denied a place there.—This is in bad taste, and the usual plea, "Oh! they are so common!" is by no means a reasonable or satisfactory objection. Whatever is perfectly beautiful might claim a place, though this would include so immense a collection, that, of course, we would recommend a judicious selection from so vast a stock.

We find upon trial some of our native plants rather difficult to cultivate; and after a few years they entirely disappear, unless special care is bestowed upon them, and their habits studied. They appear to suffer more from the effects of freezing and thawing in the winter, thus injuring the crown of their roots; or, being thrown out of the ground by the action of the frost, they are destroyed. They receive some protection in a natural state by being in winter covered with water, grass, leaves, or snow; and should likewise be protected under cultivation, by throwing over them straw, hay, litter, or earth.

The names of the comparatively tender plants are—the *Asclepias tuberosa*, with its bright orange-colored flowers. It is a rare plant in this vicinity, and we know of none in a wild state. We found it on the sandy plains four miles north-west of Albany. The rich flowering *Liatris scariosa*, with its raceme of bright purple flowers. Its root is a solid tuber, and truncated; that is, it has the appearance of its end being bitten off. The popular name of this plant is the "Devil's Bit." We were informed, many years ago, by an old root doctor, that it received its appellation in this way: It having come to the knowledge of the great adversary that this plant was useful to mankind, and possessed great medicinal properties, he, in order to show his enmity to our race, bit off the end of the root, thereby depriving it of the most useful properties. Upon doubting the truth of the legend, and observing to him that the roots of some other plants presented the truncated form, "Why, bless me!" replied the old man, "don't you see the marks of his teeth?"

The *Liatris* is found growing in a clayey soil, on the borders of woods. To this family we are indebted for many of our autumn ornaments in our flower-garden borders. They are herbaceous plants, propagated by division, and flourishing in common garden soil. Fine specimens of this plant can be easily obtained by seedlings.

The Indian Turnip or *Arum*, with its singular flower, variegated inside with stripes of pale green or brown. In autumn, the plant presents its bunches of shining scarlet berries.

The splendid Cardinal Flower, *Lobelia cardinalis*, when once introduced into a garden, will propagate itself by its seeds, and produce some fine plants.

There is another tribe of native plants that require no particular attention, but when once introduced into the garden, continue to grow and thrive for many years. The names of some of these are the *Starworts*, some of which are very beautiful and showy, and can be made to grow to the height of ten feet, bearing upon their spreading tops quite a large number of flowers.

The Golden Rods, *Salidago*, many of them coarse but showy plants. Hardy herbaceous plants, all yellow flowered; found in all parts of the country. Propagated by division of the plant in spring in common soil. Showy at the back of herbaceous flowers.

(To be continued.)

NEW ADVERTISEMENTS.

D. C. LEWIS, New York... American Stock Journal.
S. A. BUSHNELL, Hartford, O. Chester White Pigs.

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

SATURDAY, DECEMBER 8, 1860.

A Splendid Sewing Machine may be easily obtained.

THE MICHIGAN FARMER FOR 1861.

We hereby offer a splendid

BRAMAN'S SEWING MACHINE.

as a PREMIUM for the LARGEST CLUB of SUBSCRIBERS to the MICHIGAN FARMER for 1861, which shall be sent in previous to January 1, 1861. Said list not to be less than 120 in number, and to be accompanied with the CASH, at the Club rate of \$1.50 for each name.

Also, we offer as a premium for the largest club of subscribers at our club rate of \$1.50 for each name; said list not to be less than 60 in number, and to be sent in previous to Jan. 1, 1861, the

First Volume of Hovey's Fruits of America, A splendid work containing the finest colored plates of American fruits that has ever been issued.

Also, we offer as a premium for the largest club of subscribers, not less than 30 in number, to be sent in previous to the 1st of January, at our club rates.

A copy of Worcester's celebrated Illustrated Quarto Dictionary of the English Language.

All parties competing for the above premiums are at liberty to send in the names as fast as received, and the subscribers will be supplied with the FARMER from the date at which their subscription is received, for the remainder of this year, as well as for the whole of the year 1861.

To those who do not care to compete for the premiums, we offer the highest cash commission of any paper now published. Any one can act as agent. Terms made known on application. November 1, 1860. R. F. JOHNSTONE, Editor.

Editorial Miscellany

We give on another page a part of the proceedings of the meeting held by the Beekeepers Association at Cleveland. This society holds another meeting in March next, when it will discuss a very important subject, namely, *which is the best hive!* If that subject don't raise a buzz, and make some sharp stings felt, then we may take it for granted there is no poison in the bee tribe.

The communication on feeding cornstalks will repay perusal; we hope it won't come down like a fifty-six on anybody's corns. Oh no!

G. S. Bouton offers for sale his one-third share in the *Jackson Patriot* printing office. Here is a chance for an enterprising printer.

It will be noted that Seth A. Bushnell offers for sale Chester White Pigs, a variety that is coming into much vogue with pork breeders, as they have the size of the Berkshire, with the whiteness of the Suffolk.

Professor Turner, of Jacksonville, Illinois, writes to the *Prairie Farmer* that he considers the Fawkes steam plow a failure. Mr. Greenwood is engaged with Mr. Fawkes in remodelling the machine.

Our correspondent "Subscriber," if he will turn to the article in the *Farmer* to which he refers, will perceive that the context renders the illustration a very different matter from the three lines quoted. We perceived the use that had been made of the quotation when first published, but had no desire to enter into any discussion. It is our aim to render that peculiar field instructive by a simple detail of the principal events, or amusing by comments that are not intended to offend any one's partialities. At the same time believing, as we do, firmly and conscientiously, in the sentiment so well expressed by Mr. Douglas in his letter to friends in New Orleans, and which we published last week, that our country and its government are the best, freest and greatest that the sun ever shone upon, we do not feel like sitting with folded hands and closed lips like an Egyptian sphinx, and uttering no word of protest against its disruption by men whose schemes and plots for personal aggrandizement have not met with the evil success which had been planned for them. Let us all keep in mind—with a due degree of forbearance for the feelings of those who may not think with us—the words of old Hickory,—"The Union must and shall be preserved," and it will be.

Sustain Your Own Currency.

At the present time the State is flooded with appeals from all quarters, to sustain agricultural papers that have little or no interest in the agriculture of the State, and have less knowledge of it. What for instance can a paper got up in the city of New York, with its conductors all belonging to the sweltering

pavements of that city or its immediate vicinity, know or care about Michigan agriculture beyond the mere fact, that is as well known by Bonner's Ledger, that the State is a first rate stamping ground from which to draw contributions by advertising, for which it gets nothing in return? We hope our readers will advise all their friends to sustain Michigan papers and their own currency. Let them try this course for a year, and see if we won't have better times?

The Currency.

We notice that other editors are taking the same view of the currency which we have laid before our readers in the *Michigan Farmer* from time to time. The *Free Press*, of Detroit, says, commenting on the depreciated currency which prevails throughout Michigan: "It is doubtful if there is a State in the Union that suffers so much from the money panic as Michigan." There is no doubt about it. Almost every other State has a currency of its own which it sustains at par. But Michigan has none, and yet with large crops of all kinds of agricultural produce, and with productive mines and quarries, she has to do all her trading with a currency over which she has no command, and which interested parties can make it pay to force upon her. We explained two or three weeks ago how the Michigan bear got his hide taken off. As confirmatory of what we then said, our Detroit cotemporary remarks:

"The States which furnish what is denominated western currency, Illinois, Wisconsin, Iowa, and Missouri, have issued enormous quantities, and this is poured into the State in a perfect deluge. Bankers, finding it cheaper than any other currency here, introduced it to the exclusion of all other, and especially has it been so with all the Illinois and Wisconsin, and that, too, when its unsoundness was as well understood as it is to-day. The moderate discount sufficient to exclude it in part was remitted two or three months since, and western put on a par with the best of money. This was done by the bankers notwithstanding that offers were made to them not long before the panic began, by which the State could have been supplied with a good currency that is sound to day and likely to remain so. The reasonable terms on which the offers were made were refused because a slight reduction in the rates of exchange would have been necessary, and, instead of a good currency being introduced, western money was brought in because it was a trifle cheaper, and the people are now reaping the results. No sooner did the panic set in than those very parties which were chiefly instrumental in giving circulation to this depreciated currency were the very first to shut down on it altogether, or accept it only at eight or ten cents discount. The farmers and the mechanics and the laborers and the poor people generally who held the money have to bear all the loss, except when the merchants driven by necessity, take it at par for their goods; but what they can do with it without a sacrifice is more than can be told; neither their bankers nor their creditors will accept it."

The *Free Press* suggests the remedy of driving out a currency that is thus used to rob the State, and so far it is right. But they who must be depended upon to render the remedy efficacious, are the farming community principally. Last spring when we pointed out the importance of demanding specie, Michigan bank notes or eastern currency in exchange for wool, our readers adopted the advice, and for a time eastern currency was plenty, and the notes of Michigan banks of good standing were to be found sprinkled around amongst it. But when the wheat crop came on, the refusal of western was not followed up, and the consequence was that that crop was paid for in the cheapest kind of notes. The producers, as a class, have the power of changing the currency of the State, more fully in their hands than any other. The working men of cities, who are made one of the great engines of distribution, are dependent on their employers for their pay and for their weekly provision for themselves and their families. The employer has a contract, and on the strength of this he goes to the banker or the broker and gets a discount. The money dealer says "I will let you have western at par," and out it goes from the vault into the hands of the employer. He in his turn distributes, in small parcels to his fifty or one hundred men, a large portion of their pay in this depreciated stuff. They do not refuse it, because they do not desire for a few cents to disoblige their employer; whilst he tells them they must take this, or let their wages remain, as he can do no better with them. But the farmer who has his crop on hand, the purchaser of which is only an agent on eastern account, can command eastern currency if he will be firm. As we have repeated, he does not sell his produce to the

West, he sells it to the East, and it ought to be paid for in eastern money, or specie. There is plenty of either to be had, as is well said above, but the State is under the gripe of the money changers, and nothing short of denunciation from heaven is likely to turn them out of the Temple.

The President's Message.

The message of the President which has been looked for with much solicitude, is at last before us.

This document presents briefly the prosperous state of the nation, and then asks why discontent now so extensively prevails, and the union of the States is threatened with dissolution.

The long continued and intemperate interference of the Northern people with the question of slavery is presented as the cause, and the message goes on to recite all the causes of complaint which the Southern slave holders present against the North, claiming that all that the slave holders ask is to be let alone.

The election of Mr. Lincoln is asserted to be in strict conformity to the constitution, and not a cause for revolutionary resistance, and from the nature of his office he is bound to be strictly conservative. He cannot attempt any infringement of the constitution without being checked by guards, which the constitution has thrown around the office.

The question of the denial of the rights of the citizens of Southern States to take their property into the territories, is reviewed. Congress has passed no law forbidding the introduction of slaves. On the contrary, the Supreme Court has decided that slave owners may take their property into the territories the same as other property. The case of Kansas passing an act against slavery whilst a territory, is cited.

The acts of the Legislatures of the several States who have passed laws impeding the execution of the fugitive slave law, is considered and pronounced "violations of constitutional duty." Nevertheless the fugitive slave law has been carried into effect in every contested case since the commencement of the present administration.

The right of a State to secede is examined and denied. The union of the States was intended to be perpetual.

The question as to whether the people of the States are without redress against the tyranny and oppression of the Federal government is examined. The right of resistance is not denied.

The question of the coercion of a State is discussed at length. "After much serious reflection," the President has come to the conclusion that Congress has never had conferred on it the power to declare and make war on a State. Upon an inspection of the constitution, he finds that "this is not among the specific and enumerated powers granted to Congress."

It is recommended that an explanatory amendment in relation to slavery be added to the constitution, as provided by that instrument. In its amendment containing the following points:

1. An express recognition of the right of property in slaves in the States where it now exists or may hereafter exist.
2. The duty of protecting this right in all the common Territories throughout their territorial existence, and until they shall be admitted as States into the Union, with or without slavery.
3. A like recognition of the right of the master to have his slave, who has escaped from one State to another, restored and "delivered up" to him, and of the validity of the fugitive slave law enacted for this purpose, together with a declaration that all State laws impairing or defeating this right are violations of the constitution, and are consequently null and void.

The President calls attention to the fact that slave trading and filibustering have been repressed during the administration.

The Bulwer and Clayton treaty has been construed and finally settled in the most satisfactory manner. The right of search has also been construed and defined in such a way, as to maintain the most friendly relations between England and the United States.

With France the relations of the government are friendly.

With Spain our relations are more complicated, but less dangerous to peace than they have been for many years. The purchase of Cuba is again recommended.

With China and Japan the United States are on the most friendly terms.

With New Granada, Costa Rica and Nicaragua we have had all difficulties settled in an amicable manner, but with Mexico our affairs remain in a very unsatisfactory condition.

The President reviews the position of affairs in Kansas during his administration, and congratulates the country on the peace and

quiet that prevails in that territory and in Utah.

The finances are considered. The extraordinary expenditures needed for the Utah expedition and the contingent expenses of Congress are cited as tending to account for the increased expenditure. The whole expenses of government are claimed not to exceed fifty-six millions for the last fiscal year ending July, 1860. He asserts that 62 millions are sufficient to administer the government if carefully managed.

The President refers to the African slave trade, and states that since his last message not a single slave has been imported into the United States from Africa. Filibustering has also been put down.

It is recommended that all members of Congress be elected in the several States on the same day, so that Congress may at any time be assembled. Now there is a time when a full Congress cannot meet.

A modification of the tariff is called for, and the duty of imposing specific instead of ad valorem duties impressed upon Congress. The condition of the Treasury is referred to as requiring prompt measures for its replenishment.

The message concludes with a recommendation of the condition of the people of Kansas to the Congress, and suggests that measures of relief should be at once adopted.

As a whole it is probable the message will not satisfy all, as the position of the President is a difficult one, but he has issued a document which, in many respects, is calculated to do good, and which in all its features is conciliatory, and is, therefore, conservative. The leaning of its arguments is altogether with the Southern States, and with Southern feeling, and he does not give that due weight to the North which it should command as a part of the whole country. It is not exactly the message of a Jackson, as it seems to want the firmness of tone and vigor of utterance that President manifested, which gave confidence to the country, which roused patriotism amongst the people of all sections, which set at defiance all the enemies of the Union, whether abroad or at home, and which rallied around the constitution and the administration both friends and opponents in one common cause.

Literary and Scientific Notes.

We notice with regret that H. E. Hascall, Esq., retires from the management of the *Kalamazoo Telegraph*. Messrs. H. C. Buffington & Co. are now the proprietors and conductors of that excellent journal.

The two daily papers which were tried at Flint would not work, so they have been given up. The proprietors announce their decease with appropriate epitaphs, and in the very curtest style.

The Hon. Charles Sumner has lately delivered a very eloquent lecture on Lafayette, at the Cooper Institute, New York. The hall was crowded to hear him. William C. Bryant presided over the meeting.

The *Lansing State Journal* has passed into the hands of Messrs. Ten Eyck & Hawkins as publishers. J. M. Griswold, Esq., remains as editor, and in the announcement of the change, he takes occasion to say that "the Democracy should render the organs of the party a more substantial support than it has received." It is certainly always desirable that the opposition should have a well conducted organ at the seat of government.

The *Cosmopolitan Art Journal* for December is certainly a very splendid illustration of the combination of the art of the poet, the author, the painter, the engraver and the printer. Henry T. Tuckerman, R. H. Stoddard, Miss Prescott, John Esten Cooke, W. Gilmore Simms, and others of well known fame, are contributors. The engravings are particularly admirable. The *Cosmopolitan* is really assuming a very eminent position in connection with the art, and ought to be well sustained.

The *North British Review* has passed into the hands of new proprietors in Edinburgh, and the first number which has been issued by them contains articles by the most talented of writers. For instance, Sir David Brewster writes the article on "Galileo;" Isaac Taylor on "Modern Thought and its Tendencies;" Gerald Massey, the poet, treats of "American Humor and Humors;" "Logic" is by Professor Fraser, the successor to Sir William Hamilton; and Syria and the Druse Question is by the Rev. Mr. Porter, whose acquaintance with the people and the country is acknowledged as of the very highest order. This Review is published as one of the series issued by Messrs. Leonard Scott & Co. of New York, whose advertisement will be found in another column.

The *History and Analysis of the Constitution*, by N. C. Towle, is received from the publishers, Messrs. Little, Brown & Co., of Boston. This is a hand-book, is a very important publication. Each section of the Constitution forms a chapter, that contains: first, the section itself, as the text; then its history, as it first appeared in the old articles of confederation, or, if not having any prototype in them, the history of its formation, what alterations were made, who they were made by, and then its final adoption by the framers. Then follow the judicial constructions which have been placed upon the section when it has been before the courts. Following the analysis, we have a clear and succinct history of the Colonial confederations, the origin of the Federal convention, thecession of the western territory, the organization of the general government, table of the electoral votes, and the names of the executive administrations from Washington to the present time.

The volume is printed handsomely, and is a book that should be in the house of every citizen that can read.

Political Summary.

—The *New York World*, referring to the organization of "Minute men" by South Carolina, wittily says: "There's no use in their attempting to fight us, for every squad of sixty would be ours as soon as they attempted to strike."

—The Palmetto, now so popular in South Carolina, has been much neglected in Charleston in recent years. It is stated that but a single tree of the kind was to be found in the place on the day of the Presidential election. Another has been set out during the present excitement.

—The returns from all the parishes in Louisiana give Breckinridge 18,383, Bell 15,946, Douglas 9,010; Breckinridge's majority over Bell 2642, over Douglas 9378. The official returns may vary these figures slightly.

—Hon. John Bell, by request, is preparing for publication an *expose* of his views upon the present crisis. It is to be published the present week.

—The important question is now asked, whether South Carolina has not determined to destroy the breed of Hammonds, by her refusal to permit Yankee school masters to squat within the State.

—The New York charter election has resulted in the election of eleven republican councilmen, eleven Tammany and two Mozart Hall democrats. The Board of Education has twelve republicans and nine democrats.

—The electoral colleges of the several States met on Wednesday. New York, Pennsylvania and Illinois are all reported.

—The Michigan legislature is said to be so one-sided that when it lies down it can't turn over, for want of another side to rest upon!

—Gen. Houston of Texas has declined to call a meeting of the Legislature to consider secession programmes.

—Mr. Douglas has been received at Washington with complimentary honor. The Douglas and Johnson association turned out to the number of two thousand, and Mr. Douglas addressed them in a short but felicitous speech.

—Prentice of the *Louisville Journal* says, with emphasis and truth, "The most accursed traitors to the South are those now within the lower Atlantic States who are forwarding exaggerated and mendacious telegraphic despatches to the North. If North and South Carolina will include among those liable to penalties for incendiary publications the utterers of these monstrous atrocities, we shall rejoice most heartily."

—The *Boston Transcript* compliments telegraph operators and special correspondents, by suggesting that instead of the technical word "telegram," we should adopt the more expressive one, "tell-a-whopper." This hint will certainly be adopted if the tea cup tempest of secession continues, and the reporters of the Southern region persist in sending their purely fictitious messages over the wires.

—A number of prominent non-political planters and merchants of the Southern States arrived at Washington on Saturday, in accordance with an arrangement among themselves. They represent four millions of slave property, which they consider safe while in the Union, and as utterly worthless while out of it. They waited on the President, and after consultation have returned to their respective States to prepare a manifestation of the conservative sentiment which prevails.

—A dispatch from the Colonel commanding the Missouri district, and who has been on the border by special order of the government, states that Missouri has not been invaded by Montgomery, nor is it like to be. Only sixteen of Montgomery's men had approached Fort Scott at any time, no attempt had been made to hold the district court by Judge Williams, and there was no occasion for the court to leave the Territory. Three men had been hung and two had been shot in the Territory. Col. Snyder organized the militia on the border, and recommended the government to establish arsenals for worse emergencies.

—"Excelsior," the correspondent of the *N. Y. Courier and Enquirer*, writes thus from Washington: "I aver it as a significant fact that South Carolina is getting into shockingly bad odor with our people here. They are beginning to examine her geography and population and power, and we find that her whole white male population, between the age of twenty and sixty, only amount to 56,000, all told. This is considerably less than the population of Washington. Every day will increase the indignation against the anti-republican State of South Carolina, which is at best a community foreign in its nature to the rest of the country."

—There seems to be a disposition at the South to act in good faith towards the North, at least in commercial matters; but the terrible despotism which controls the press and the people will not let a single sound be heard except a secession or disunion howl. Happily even dogs get tired of baying at the moon, and allow peaceable citizens to enjoy her light without having their ears greeted with discord. We note that several of the wholesale firms in Georgia are writing to their northern correspondents, that they at least are going to pay their debts. In another instance, the *Columbus Times*, of Georgia, has a notice, signed by all the prominent firms and merchants, saying that they are opposed to anything like stay laws, or any measure looking to a release from creditors or obligation at home or abroad.

—Truman Smith, once Senator in the United States from Connecticut, has written a very excellent letter to A. H. Stephens of Georgia, in which he says: "But you glanced at the true source of all these sectional difficulties when you said, in the speech alluded to, 'Some of our public men have failed in their aspirations; that is true, and from that comes a great part of our troubles.' I understand you to give a southern, if not a Georgian application to this remark, but the true state of the case calls for an application alike to both sections. By this I desire to say that these disturbances are created by public men of the North and South alike, and have their origin almost exclusively at Washington. They are prompted by

46-ly 48 CEDAR STREET, NEW YORK.

The Household.

"She looketh well to the ways of her household, and eateth not the bread of idleness."—PROVERBS.

EDITED BY MRS. L. B. ADAMS.

IMPROMPTU LINES TO AN ABSENT HUSBAND.

BY ANNA A.

Come back to thy home, love,
O stay not away;
The hours pass so lonely
Through the long summer day;
The children they miss thee
When evening doth come:
Come back to thy home, love,
Return to thy home.

Come back to my heart, love,
Return unto me,
While the sun shines so brightly
O'er land and the sea;
Let the sound of thy voice,
So tender its tone,
Be heard in thy home, love;
Once more, dearest, come.

With smiles we will greet thee,
Dearest of earth!
Our hearts they will echo
With gladness and mirth,
When the sound of thy footsteps
Shall be heard at the door—
Come back to thy home, love,
And leave us no more.

Lake Huron Shore, 1880.

"Hands and Minds."

Noticing an essay in a late number of the *FARMER* signed by a school teacher who chooses the odd cognomen of "Silence," we venture a few thoughts called forth by her remarks. Knowing something of the pleasure of boarding around and also being somewhat versed in the duties of housekeeping, we are acquainted with the privilege, trials and vexations of each department.

Persons are apt to make conversation and dwell on what is uppermost in their minds, especially if naturally of a sociable disposition.

Some words of "Silence" were cheering, for we find that all females have not been engaged in politics during the past political campaign, leaving their dinners and suppers entirely to Betty, from whose incomplete hands, in a majority of cases, the eatables would be likely to appear in a very unpalatable style. Not that we believe in smothering our talents under kitchen rubbish, or retelling our petty household vexation to those who may enjoy the benefits of our housekeeping.

Living where there is no school, consequently no teacher, being pioneers in this northern Michigan, we have had time to think and read while the greater portion of our country was agitated with sectional difficulties and political strife.

But the question is, should we allow our hands to so occupy our entire thoughts as to prevent the cultivation of our minds; especially if we can find leisure it is not our duty to improve our minds as well as to devote our entire physical and mental energies to the house and table.

We are not writing to those who neglect their households, vainly imagining they are excessively literary, like a female whom we once met, who because some fifteen or twenty lines of blank verse of her composing, once appeared in a country newspaper, on being asked by her daughter for a piece of bread and butter exclaimed with well feigned astonishment, "Ask the girl, child, I don't know where the butter is!" but we write to those who are excellent housekeepers, who read the "FARMER," who often wish that they had the time for mental improvement they had in years past; to such we say try to have some interesting conversation for the table; some entertaining book for the evening; something to make your family cheerful and happy.

Teachers usually talk of their schools and its duties, and it requires the good humor and judgment of "Silence" to get along without creating an uproar in their districts, when they are entertained in so many homes.

Not long since, we were inquiring of a friend regarding a teacher whose academy we for some time attended and whose whole conversation was formerly on books—Grammatical, Geographical and Mathematical—and were somewhat amused by the reply that he talked principally of sheep, having thrown aside teaching, which he had followed for years and was then devoting his energies to farming. Probably had any remark called his attention to his former profession, he would have been as literary as ever.

Will not our teachers that board around, and who may in days to come be worthy housekeepers, try and suggest themes for conversation, useful and entertaining, in families where they may sojourn while fulfilling their duties of the season.

ANNA A.

It is mentioned as a curious circumstance that a watch should be perfectly dry when it has a running spring in it.

A Ten Days' Tour.

BY SLOW JAMIE.

I was called last week on professional business to Steuben county, Indiana. As it would require a ride of twenty-five miles to take me to the railroad, and another of twenty to carry me thence to my destination, I thought I might as well go by private conveyance the whole way, which at most could not be over one hundred and fifteen miles. Accordingly, on Tuesday the thirteenth of November, I mounted my pony and with my saddle bags behind me set out in old-fashioned style.—A pleasant ride of twenty-seven miles brought me to Ann Arbor, where I spent the rest of the day very profitably. At the University, I saw Dr. Tappan for the first time. He has a high forehead, a mild but expressive eye, and a countenance indicative of that kindness which it is well known secures the good will of all his students. In lecturing, his utterance is not loud, but clear and distinct.

I spent three hours in the museum of the college, and found the time all too short. A thousand specimens of mineralogy, as many shells of all varieties, a multitude of preserved reptiles and stuffed birds and beasts, to say nothing of the fine arts, afforded a delightful feast to the eye. The amateur might spend weeks there and still come away unsatisfied. I had not time to take even a glance at the library. Ann Arbor bids fair to become the Athens, not of Michigan, but of America.

Wednesday morning I mounted again and pursued my way south-west, through a fine agricultural country. The weather you remember was delightful. The sun shone through the blue haze of Indian summer, and the industrious farmers improved the opportunity to gather in the remains of a fruitful harvest. The rich juice came foaming from the cider press, the heaps of golden corn enlarged before the busy huskers, and the rapid stream of wheat pouring from the noisy machine, gave promise of bread to thousands, perhaps beyond the sea.

A little after noon, I stopped at a farmer's house for refreshment, when I remembered that they had taken the last of my silver at Ann Arbor for my horse-fare. I told the good people that unless they could change a bill I could not pay them for their trouble; they said it mattered not. As they had dinner over and I would not be allowed to pay, I declined taking any refreshment, but only desired my animal fed, but the more I insisted on my own way, the more they would not listen. They hurried me up a hasty cup of coffee, filled my pockets with mellow apples, and sent me on my way, rejoicing, not that I had got my dinner, for that was a small matter, but that so much generous kindness was yet to be found. In some places kindness can be bought with love, in more places with money, in a very few localities it can not be had for either love or money. But there are spots in the world where it is as a Scotch poet says—

"A fountain bursting from the heart,
Which travels on its way,
And channels deeper as it runs
The joy of life's young day."

As I passed through the corner of Jackson county and on into Hillsdale, I found a country more picturesque, but perhaps not so rich. Sharp peaks, and abrupt hollows, diversified the landscape; still they were not too steep for cultivation. I also noticed something which I have rarely seen in Ohio, and never in Pennsylvania—deep basins which would be ponds or lakes but for the want of water. Sometimes they resembled wash-bowls and sometimes canoes, but often they looked like nothing earthly but themselves. But whatever their shape was, they were beautiful. The absence of water indicated a porous soil; the timber was generally oak, and I have no doubt the soil was good for wheat, but not so well suited to grass. Still I noticed some good herds of cattle and heard some flocks of sheep. The latter might well be good, for they were often turned into the wheatfields to eat down its heavy top-growth. Whether this was good economy or not, the owners knew better than I. And as they asked no advice from me, I gave them no counsel and got as much thanks.

The eastern part of Hillsdale, I found much improved since 1856. Handsome white houses had taken the place of log cabins, the plow had encroached on the rabbit and wild turkey, and signs of general thrift prevailed everywhere. On Thursday night I reached my destination safe and well, but with a distressing pain in my side, from being so long in the saddle, to which for the last six years I have been but little accustomed. I had ridden thirty miles that afternoon.

Some of our readers will be glad to hear that brother French is well. He is as humorous as ever, but not quite so fat. His domestic garden has been beautified with the fourth flower—a daughter four weeks of age.

Four days were pleasantly spent in religious communion with his people. To some the worship of God may be an irksome duty. I confess their taste is very different from mine. Even though the Bible were a fable and death a perpetual sleep, still the practice of religion will not be lost labor, for it brings its reward with it. If it be only a dream it is certainly a very pleasant one. Four years is a short time, yet it had wrought many changes on the little congregation. Some had gone to other places, some had gone to their final reward, and a few had turned aside in the paths of folly. But the changes are not all for the worse. If old faces were gone, new ones were there; some of them too were little bright faces, the hope of a coming age.

True to our Savior's injunction, I did not go from house to house, but abode in the place I first entered. The accommodations were good, but that was little to me. I have often enjoyed myself in the humblest cabin. I have sometimes been uncomfortable in the stately mansion. But I was entertained indeed. I found there one of those old-fashioned grandmothers, which are seldom seen now, except in pictures, with the snuff-box, the great frilled cap, and the dignified air.—They have a certain stern look, but it covers a great deal of real kindness. Their concern extends to the comfort of all, they have a particular care for cats, children and ministers. When I could spare an hour from my books, the kind hostess led me a ramble among the heights of Donegal. However much there may be to censure in Ireland, and however much some may be inclined to laugh at it, my heart's sympathies are still in the Green and weeping Isle. From an early day, it was called among foreigners, the "Isle of Saints," and there still have been a few of its inhabitants, who gave it a title to the name. She told me of the great meetings they used to hold out of doors there on communion occasions. They all carried their swords (so they poetically named their pocket bibles) and all joined in singing the psalm. It was necessary to read the psalm line by line, although they could nearly all repeat them in the good old Scottish version, but it was necessary thus to keep the singers, in so large an assembly, all together; and the volume of sound swelled up like the roar of the sea.

She entertained me with anecdotes of Mr. White, who without elocution or ornament, could hold such an assembly enchained from morning to night, with a pure stream of thought. She told me, too, of Mr. Fullerton, whose every word was carefully weighed, and every sentence a sermon in itself. She talked of Mr. Alexander, whose fervid eloquence could stir up the blood of the coldest. Once he preached all day out of doors in the rain. Those who had umbrellas gave them to the aged and females who might have none, and stood uncovered themselves, yet there was no complaining, for when the fire was burning within, outward cold was lightly regarded.—She remembered also Mr. Staveland, whose terrible earnestness instructed the ignorant and stirred up the learned.

On Tuesday morning, bidding kind friends a reluctant farewell, I set out home. The weather by this time was changed. Gloomy clouds overspread the sky, and the snow fell in feathery flakes. However this change only verified the saying of Solomon that, "He hath made everything beautiful in his season." If bright sunshine stimulates to action, gloomy weather lulls to repose. The exhibition of pleasant sights, the enjoyment of friendly intercourse, and the long continued stretch of intellectual exercise, had raised my blood almost to a feverish excitement. A longer continuance of it would have been dangerous to my health. The gloom of snowy weather was really pleasant and I rode along in silence.—When night came it found me better disposed to sleep, than I had been for a week. Nor was my journey back devoid of enlivening interest. The clangor of wild geese as they flew over my head, bending their course to the south-west, and even the whirring of the wild duck's wing as it sprang from the lakelet, reminded me that other travelers were abroad as well as myself. Besides I had gained so many thoughts from others, as well as from observation, that to ruminate on them, kept me in employ during my long ride. As I approached within a few miles of Ann Arbor, about dark, a large black dog bounded up and pursued me with a peculiar interrupted bark. In a minute he ran before me and stopped at a bridge. I saw by the dim moon light that the planks had been removed for repairs. The moment I turned down to the fording, he turned quietly back to his bed. He need not have been at the pains to warn me, for large stones had been placed across the road, to give due notice.—Still I was thankful to the poor brute, as if

his pains had been necessary. Dogs and children often put themselves to trouble to tell what we know already, and only get laughed at for their pains. This is neither right nor generous. Commendation is all the reward the poor creatures expect, and he is a churl who will not give.

In Ann Arbor a congregation was waiting on me in the Methodist Church, but I had been so detained with the snow which balled on my horse's feet that it was past the hour before I got in. Hastily swallowing a cup of tea I repaired to the house where a respectable, audience were in waiting, and if I did not impart any benefit, at least received something by the law of reaction. The next day, which was yesterday, I again visited the university and then came home. And now I am writing this with the pen in one hand, and the inkstand in the other to keep it from a laughing codger of nearly two summers. Pleasant as the trip has been, and although I put my hand on my side every now and then with pain, yet I feel happier here than I did any where else. So true it is that a home is a home be it ever so homely. Happy they who find a home in heaven.

THE WATER-KELPIE.

A FAIRY TALE—FROM THE INDEPENDENT.

Once upon a time, a race of fairies, called Gnomes, lived under the earth. They were strange little beings, with dull eyes and yellow faces; but they did no harm, and lived in peace.

They never saw the sun; but they had lamps much brighter than our gas-light, which burned day and night, year after year.

They had music, but it was the music of silver bells and gold harps, not half so sweet as the singing of birds and the babbling of brooks.

There were no flowers in the kingdom, but plenty of gems. There were trees, to be sure, but they bore apples of gold and cherries of ruby stones, which the Gnomes ate with great relish.

They heaped up piles of gold and diamonds as high as your head, and none of the Gnomes ever thought of building a house of anything coarser than precious stones.

You would have believed you were dreaming, if you could have walked through the streets of their cities. They were paved with white marble, and the palaces twinkled in the gas lamp-light like a million stars.

They lived a stupid sort of life, and cared for little but eating and sleeping; but what could be expected of creatures without souls? I am afraid some human beings do not behave much better than they did.

Now, there was among these a young girl called Moneta, who thought she would like to come out from under the ground, and see the earth for herself. Moneta had heard that fairies who marry mortals receive the gift of an immortal soul; so she was determined to go. The Gnomes declared, with one voice, that if she went she should not be allowed to come back. An old Gnome who had seen the world, took her one side and said:

"My dear Moneta, since you are resolved to go, I will tell you a secret: Mortals are a higher race than ourselves, it is true; but they love money better than their own souls. So I advise you to load yourself with as much gold as you can carry."

So Moneta put on a heavy dress of spun gold, which was woven in such a manner that at every motion she made it let fall a fine shower of gold-dust. She filled the sleeves with jaspers and rubies, and hid in her bosom diamonds enough to purchase a kingdom.—Then she ascended a steep ladder, and knocked on the marble ceiling, using the charm which the Gnome had bidden her:

"Mother earth, mother earth, set me free."

At her words, there was a sound as of an earthquake, and a little space was left just large enough for her to crawl through.—When she had reached the surface, the earth closed again, and she was left seated upon a rock. The light of the sun dazzled her eyes so much that she hid her face in her lap.—Thus she sat for a long while, not knowing whither to go, till a young man chanced to come that way, who said:

"What do you there?"

She raised her face at his words, but so surprised and charmed was she with the great beauty of the strange youth, that she could not utter a word. At the same time, the young man could hardly refrain from smiling, for she was as yellow as an orange, and he thought her the ugliest little creature he had ever beheld. But he said:

"Come with me to my mother's house and you shall refresh yourself with cake and wine."

She arose to follow him, and, as she walked, a fine shower of gold-dust fell from her

dress at every step. The young man thought he would like such a rich maiden for his wife, and he said such loving words, with such sweet smiles, that in time she became his bride. So great was her love for him, that she forgot her lost home under the earth; and every morning she placed in his hand a precious stone;—then he always kissed her, and said, "Dear Moneta."

But at last the diamonds and jaspers and rubies were all gone, and more than that, she was fast losing her power of shedding gold-dust. Then her husband frowned on her, and no longer said "Dear Moneta."

Yet all this while she was growing beautiful, and the light of a pure soul shone through her eyes.

At length a little daughter was born, as lovely as a water-spirit, with hair line threads of gold. Now he watched the babe when it cried—for Moneta had wept drops of molten gold before receiving the gift of human tears—and he hoped the child would do the same. But when he found it was only a mortal infant, he shut his heart against the babe.—The wife wept in silence, for she saw how it was.

"He does not care for the child," said she, "and since I have lost my fairy gifts, he loves me no longer."

The mother would have wished to die, only her sweet babe comforted her heart.

One day as she was sitting by the shore of the lake, a Water-Kelpie saw her weeping, and came to her in the form of a white-haired old man, saying:

"Beautiful lady, why do you weep? Come with me to my kingdom under the waters.—My people are always happy."

Then she looked where he bade her, and saw afar down under the waters, a beautiful city paved with red and white coral. The Kelpie said:

"Will you go down?"

"No," answered Moneta, "I cannot go yet."

But the Kelpie came every day and said, "Will you go now?"

So one day Moneta carried her child to its father, hoping he would kiss its sweet face, but he said with a frown,

"Take it away? If I had no wife and child, then this palace and all the gold would be mine."

Then the wife said to her husband:

"I have loved you truly, but you no longer care for Moneta. I will go away with the little child, and all our gold shall be yours.—Farewell."

Then she embraced him, weeping bitterly.

His heart was stirred within him, and he would have followed, but did not know whither she had gone.

Soon the Water-Kelpie appeared, in the form of a horse, and ran before him, neighing fiercely, and breathing fire from his mouth.—It is well known that in this way the kelpies warn people that some one has gone under the waters.

The man followed the Kelpie. His heart was full of grief, and all his love for his wife and child came back to him.

He looked into the lake and saw the fair city. Moneta was sitting, crowned with pearls, and twining about her fingers the soft hair of the child.

He shouted, "Come back, O Moneta!" but she heard him not.

He went every day to the same spot, and never left it till he had seen his wife and child.

He did not care for his palace and his gold;—the palace was empty, and the gold could not speak.

"Alas!" thought he. "If I could only hear Moneta's voice—if I could hold the child in my arms once more!"

Now he cared for nothing but to gaze into the waters at Moneta and his child.

One day the Water-Kelpie came to him in the form of a man.

"Why sit you here, sighing like the north wind?" said the Kelpie.

"I have loved gold better than my wife and child," said the man, "and now my wife and child are gone, and only the gold is left; but I no longer care for it."

"Ah, ha!" said the Kelpie, "I have seen men like you. You should have thought of these things before. Now, if you had your wife and child back again, I dare say you would treat them as badly as ever!"

"No, no," cried the man; "I would prize them above my gold. Nay, I would love them better than my life!"

"Hold," said the Kelpie. "If I will give you back your wife and child, will you give me your chests of gold?"

"Oh yes!" cried the man.

"Stay," said the Kelpie, "will you give me your palace too?"

"That I will, gladly," cried the man.

"Not so fast," returned the Kelpie. "Mo—"

meta and the child are worth more than these; will you give me your palace, and your gold, and ten years of your life?"

"With all my heart," said the man.
"Go home," said the Kelpie, "and to-morrow they shall be with you—your wife and child."

When the morrow came the husband and wife wept for joy at meeting once more, and the husband said:

"Can you forgive me, Moneta?"
She forgave him, and the three lived together for the rest of their lives, as happy as mortals can be, and the man said:

"Now I know that gold cannot make one happy, but that my wife and child are better than all else in the world besides."

THE RAPIDS—ST. LAWRENCE.

BY CHARLES SANGSTER.

All peacefully gliding,
The waters dividing,
The indolent batteau moved slowly along,
The rowers light-hearted,
From sorrow long parted,
Beguiled the dull moments with laughter and song:
"Hurrah for the rapid! that merrily, merrily
Shivers its arrows against us in play;
Now we have entered it, cheerily, cheerily,
Our spirits are light as its feathery spray."

More swiftly careering,
The wild rapid nearing,
They dash down the stream like a terrified steed;
The surges delight them,
No terrors affright them,
Their voices keep pace with the quickening speed:
"Hurrah for the rapid! that merrily, merrily
Shivers its arrows against us in play;
Now we have entered it, cheerily, cheerily,
Our spirits are light as its feathery spray."

Fast downward they're dashing,
Each fearless eye flashing,
Though danger awaits them on every side;
You rock—see it frowning!
They strike—some are drowning!
But downward they speed with the merciless tide:
No voice cheers the rapid, that angrily, angrily
Shivers their bark in its maddening play;
Gaily they entered it—heedlessly, recklessly,
Mingling their lives with its treacherous spray.

"THAT BOY, SIDNEY."

BY MRS. H. E. G. ARRY, IN HOME MONTHLY.

"Upon my word, that child is in the parlor, and I told him not to go," said Mrs. Bubbleton, with a weary sigh. "How shall I ever teach him obedience? He is an organized rebellion—an irrepressible conflict! My very life is worried out of me with trying to bring him to terms."

"I would stop trying," said Aunt Mary, with a smile.

"You don't know anything about it, Mary," returned Mrs. Bubbleton, raising her voice a trifle from its complaining tone. "Your children have all been quiet, well behaved children, and so have mine, until this one. But he never has acknowledged my authority from the moment he was old enough to know he had a will of his own. And he has always known it. The first time I saw him he sat bolt upright, looking me in the eye as if he knew he was master."

"Look at him now," she added, starting from her seat, as the fall of something in the parlor broke upon her flow of speech. "Here he has torn one of my new chairs all to pieces. He was crazy to get hold of them when they came. That was the reason I shut him out of the parlor, and now he has taken the first opportunity to steal in in opposition to my orders. He has broken the carving off the top, I dare say," and she took hold of the child with one hand, and with the other attempted to raise the chair he had upset. The child clung desperately to the chair, and in the effort to lift it, the bottom fell out.

"Oh, look a there!" exclaimed Sidney, dropping his mother's hand and the chair at the same time, and springing upon the fallen seat. "See 'em, see 'em, mamma; there's engines in it. Give me Wallie's key to wind them up, and see 'em go, just a little; do, do, mamma. Just a minute. Oh, mamma, mamma, wind 'em up, and let me see 'em go." And still resisting his mother's efforts to remove his hold from the seat, he showed the intensity of his excitement by accompanying his rapid speech with a running tattoo of his feet upon the floor.

"You've disobeyed me, my child," said Mrs. Bubbleton. "I told you not to come into the parlor, and here you are ruining the new chairs. I have waited so long to get—Let go of it, I tell you. You've got to mind me."

"Oh, mamma, mamma! it's full of engines. Sinnie wants to see 'em go. Just wind 'em up once, and see 'em go. Peas mamma, do, do; Sinnie's mowf is full of kisses for you—Just wind 'em once, and see 'em go."

"You have disobeyed me, Sidney," and Mrs. Bubbleton, with a quiver in her voice. "Mamma can take no kisses from you while you are such a naughty boy. Take your hand off the chair. I tell you to let go of the chair." But still the child kept up upon

the chair the hold that his mother was trying to loosen, and never paused in his skillful pleading, to listen to her commands.

"I think you give him too little time, Martha," said Aunt Mary, who had followed her sister to the parlor.

"Time!" exclaimed Mrs. Bubbleton, impatiently. He takes all my time. I just follow him about from place to place, through the whole day, to repair the mischief he does."

"Perhaps if you gave him more time, he would take less," said Aunt Mary. "See here, Sidney. These are not engines; they are the springs to the chair. Look! there is no place for a key. They are springs to keep the cushion up round and nice. They won't go, like your engine."

"He doesn't listen to you," said Mrs. Bubbleton. "He never listens to anything but his own crazy talk. I never could keep him still long enough to teach him anything. He is always dancing round in this preposterous way."

But Sidney was listening. Something in Aunt Mary's voice or eye attracted him, and, dropping down beside her, he peered curiously at the springs, which were visible between the straps that formed the bottom of the seat, while Aunt Mary explained the difference between them and the broken engine which was the chief treasure among his dilapidated toys. The spiral coil of the spring had seemed to him like the coil which set his engine in motion, and the fancy that by winding them up, he could set the chair seat in motion about the floor, had driven him wild.

"Aren't there no place for a key?" said he, with exceeding gravity, after he had examined them this side and that.

"No," said Aunt Mary. "But there's a nice place in the chair for this seat. Let's see; is that the way to put it in?"

"No; it's a zee ozzer way," said Sidney, recommencing the dance with which he usually accompanied himself on the floor.

"Do you think it's the other way? Well, Sidney shall help me put it in."

"That's it, that's it, there!" said Sidney, proud of his own importance, as the seat slid into its place.

"There now," said Aunt Mary, "we'll go in the back parlor. Aunt has got a story to tell a nice little boy."

"I don't want to hear any story, I want to see the rest of 'em, I do, I do," cried the child, jumping up and down, and tossing his hands about so that it was next to impossible to take hold of him.

"Oh! do you want to see the rest of them? Well, here is this one; we'll look at this.—You see this is a rocking chair, and the seat won't come out; but we will look under it, and then we can see the springs. See how I press down upon them, and how they come back again, up! They make the seat very nice. There is no place for a key in any of them. Now let us go in the back parlor, and see if we can find any springs in the chairs there;" and the child went out willingly with her, and she set him at a new play with his toys, that occupied him for at least fifteen minutes.

"You would have your hands full if you were to try to manage him in that way," said Mrs. Bubbleton, with a worried look.

"I have no doubt of it," said Aunt Mary; "but perhaps my hands would be no more thoroughly filled than yours are, with your way of managing him."

"You think I don't manage him at all, I suppose I should have thought so if I had seen such a child in any other house. But I know the task I have had all his life. I could bear anything better than a disobedient child."

"I could bear his eager, impulsive disobedience better than deception. Many children make an outward show of obedience a cover for the sly trickery by which they accomplish their aims. He is a bundle of energy, eager, active, and investigating."

"Yes, indeed," interrupted Mrs. Bubbleton. "His investigations upset all my household arrangements from garret to cellar."

"Martha, I don't think you have a spot of room for him in the whole house."

"My other children have always found room enough."

"Yes, for precise, orderly children. He is of a larger pattern, and if you fail to make more room for him he will make it for himself. I should be careful how I crushed the abundant energy he possesses. He will need it all to carry him through the world." And Aunt Mary sighed as she thought of her own eldest born, whose mild, gentle temperament, attracted every one in his boyhood, but who, now, in his manhood, found the rough ways of the world too much for his shrinking nature.

"I do not see what I can do for him more

than I do. He has taken me by storm. All my leisure is occupied with repairing the mischief he does."

"I do not see that you have any leisure.—I think you attend too much to household matters. You are too ambitious to have everything a little better than anybody else. If Sidney were my child, I should wish him to have a room where he could have his own way, and pursue his hammering and investigating disposition to his heart's content. He is the best boy in the world when he is satisfied. You have no room that you can well give up to him, but you might take the fifty dollars you have laid aside for your shawl, (your cloak is good enough) and build a room opening out of this little hall. It would be near enough for you to oversee him, and he could have his toys there, and his imaginary cars, and horses, and wagons, and such carpenter's tools as you are not afraid to have him use. You have a young eagle. I should give him room to soar, instead of trying to clip his wings. When new things are brought into the house, I should show them to him, and explain them thoroughly. That is what he wants. Those tall ornaments on the mantle-piece have driven him crazy when he has seen them, ever since I have been here, until yesterday, when I took them down, and let him have a thorough investigation of them. He was satisfied, and watched them with a great deal of quiet pleasure from his low seat, afterwards. This morning he came, and slipped his hand in mine, and offered me a kiss, and then said, 'Aunt Mary, please show me the tall things, again.' A few such explanations would give him the knowledge he is determined to have, and I think would save from the time you use in keeping him away from the objects he wishes to examine. Tell me, did you ever stop to show and explain anything to him, in his life?"

"I never have time, Mary. He is more than my hands full. It is all I can do to keep him clothed. He destroys more clothing, it seems to me, than all the rest of my children together."

"I can't help thinking that Sidney Bubbleton will pay for his clothes. I have taken a great fancy to your boy, Martha. Look at the head he has. You never can keep him quiet. There is too much of him. He will, of necessity, educate himself very rapidly; I think it would be worth your while to take the time to direct his education."

"Do you know what Aunt Hannah used to say? that the woman who allowed her children to hinder her in her work was spoiling them?"

"Spoiling them," Martha, that is what she said. Her rules were for the women who bring up their children in the street-school. Do you know what has become of Aunt Hannah's children? And yet, knowing as you do the result of her management, I should think from what I see, that her teaching had had its effect upon you."

"Well, Mary, I have no doubt that you are right; and I am sorry that any other person should have to plead my boy's cause with me. But you know how busy I am; and I certainly cannot suffer him to disobey me."

"I do not believe he would disobey you, if you (excuse me) were reasonable with him. You deprive him of that which is, to him, the very breath of life. He has no resort but to break your orders. You say he is an 'organized rebellion.' I think he is, and that his rebellion is organized upon about as good grounds as that which brought freedom to our country."

"I see he has a strong coadjutor in his defiance to my authority," said Mrs. Bubbleton, with a smile that was not altogether a happy one.

But Mrs. Bubbleton, under the stirring surface of her own somewhat concentrated nature, had a good substratum of common sense, and the advice of her sister was not useless to her. The shawl which she had fancied—without being aware of it, of course—would look better than her neighbor's, was given up, and a play room for the children was built, but the other children were at school, and Sidney was installed master of it, with such things as could aid his inventive, and investigating disposition at his command; and his mother did not forget to explain and assist him, and to enjoy his happiness with him; though, to tell the truth, she was often sorely tempted to put him back under the strait jacket of cold, unsympathizing authority. And Sidney, always a remarkably affectionate child, grew to listen to his mother's voice as a delight, and not a deprivation, and her command as a thing it was pleasant to obey.

Years passed, and the stirring, active woman felt the calm dreaminess of autumn coming over the restless summer of her life.—

She grew to sit longer at the fireside, and to answer the calls of her household with a statelier and less eager step. Her husband was asleep among the graves on the hill side, and her elder sons had gone from her to make their own paths in the world, and Sidney, her youngest born, was at the head of the household. He had only the first dawn of manhood on his life, but it was a stronger, heartier, healthier manhood, than had ever stood at the head of the household before.—Mrs. Bubbleton might not acknowledge it in so many words, but she had reason to be aware of it every day of her life. Sidney knew just how everything should be done, for he had used his eyes and his hands to advantage all his life. He knew how to manage for others, for he had learned long since to manage skillfully for himself. He knew how to conquer the temper of others, for he had had a violent temper of his own to conquer, and had placed it wholly under his control.—And he knew how to act, for he had that within him which had never been quiet, and the restless current of his nature had been turned to systematic action, and not chaotic ruin.

It was long since Mrs. Bubbleton had visited her sister Mary, and she was going now to spend the coming Christmas with her sister and her assembled family. The journey was a long day's ride, and Mrs. Bubbleton, with the love of quiet that was creeping over her, looking upon it with something of dread; but Sidney was to bear her company, and she knew it would be all right.

It was not all right, however. There had been heavy autumn rains, and the ground was soft and spongy. And then the surface froze, and was covered with a heavy fall of snow. But the night before they left, it rained again; and though it was fair in the morning, there were some signs of a holiday thaw. They went on their way comfortably until the short winter's day had deepened into night, and they were near their place of destination when the cars plunged once more into a region where it rained,—where, in fact, it had rained all day. There was a bridge ahead, and the engineer, a little suspicious of the weather, went on cautiously; not with sufficient caution, however. If he had, he would have stopped, and sent some one to examine the sleepers before going on to the bridge at all. And that one would have discovered that the stream was fiercely swollen, and that the sleepers in the centre of the bridge had already given way before its force. As it was, the train went on slowly to the middle of the bridge, and then there was an ominous grinding sound, and then a crash; and the engine was in the middle of the stream, and the baggage car pitched sideways over it, and the first passenger car tilted precariously over them both: and the lights were out, and the fierce waters raging about them. The lights were out, all except the one that Sidney Bubbleton was sheltering carefully with his hand. He had risen to his feet in an idle way, when he saw the manner in which the train was driven upon the bridge, but his faculties were all upon the alert, and with the first grinding sound he came his mother's side, and dropped the ample folds of his cloak about her head, as she sat drowsing, to smother the sight and sound of what was coming, while with the other hand he steadied the light at his side.

When the crash was over, he threw back the cloak, and let the light shine upon his mother's face and his own, and said in answer to her frightened grasp upon his arm, "We are safe, mother. Now don't move till I come back. Don't let any one move you. Be sure that I find you here when I come back," and then, through the crowd of frightened, screaming passengers, he made his way out. The fall had not been a very great one, the bottom of the car was smashed at the rear, and some of the seats were broken, but he was sure that most of the passengers were safe thus far, and the question now was, whether they could be saved from the greater damage of the flood. Standing upon the side of the half submerged engine, he threw his light forward till it showed the shore, and he knew their distance from it. And then he threw it up among the broken timbers of the bridge, calculating the chances there.

"You will be crushed in pieces!" "You will bring the timbers down upon our heads!" shouted the men who had followed the light, when they saw him swing himself up among the over hanging timbers. But Sidney Bubbleton had examined carefully the whole length of the timber he had leaped up and seized, and knew the ground on which he was treading. Then he went forward with his light, and his examination, followed anxiously by the eyes of those who stood upon the surging mass. For a self-possessed man carries authority with him in a tumult. "Throw me a rope," he cried, coming back

to the timber over their heads. And the rope was found, and thrown up to him, and looping it rapidly into a kind of ladder he threw back one end, to be fastened to the embedded engine. Darting down it he found his mother, and led her first over the dangerous road he had discovered, to the shore.—And leaving her sheltered by his cloak, he went back, and led one after another by the same path to a place of safety. "Who is he?" said one. "Is he your son?" asked some one of his mother. "You must be proud indeed of such a son." And Mrs. Bubbleton bowed her head, and sighed with self-reproach as she thought of the time when all the trouble in the house was laid to the charge of "that boy Sidney," and she had failed to recognize the noble spirit that was growing up under her hand.

Mrs. Bubbleton has gone to her rest now, but to her last day her son Sidney was her strength, and her solace, and out of her own house, she had lived to know that he was a master among men. He has made his own way in the world, and the way of a hundred smaller men who have fallen in behind to drift gratefully in his wake. And you, when you hear his name, feel a thrill that gives you a truer pride in the race to which you belong and a stronger love for them.

Miscellaneous Enigma.

I am composed of 22 letters.
My 12, 16, 15, 2, 5, 9, was Secretary and Biographer of "Charlemagne."
My 9, 3, 6, 8, 20, 16, 1, is a city of Michigan.
My 2, 5, 11, 10, 7, was an Austrian General noted for his cruelty.
My 18, 10, 17, 4, 14, 13, 20, 20, 8, 22, was an American officer who gallantly defended Fort Stanwix against the British.
My 16, 21, 1, 5, 19, 10, is a part of Guatemala where Alvarado built the ships in which he sailed against Pizarro.
My whole is one of the best family newspapers in the United States.
Greenfield, Mich. H. W. J.

ANSWER to Enigma of last week—Take not the name of God in vain.

RAWLINSON'S HERODOTUS NOW COMPLETE

D. APPLETON & COMPANY,

443 & 445 BROADWAY,

PUBLISH THIS DAY,

Volume 4, and Last, of

THE HISTORY OF HERODOTUS.

A NEW ENGLISH VERSION

Edited with copious Notes and Appendices, illustrating the History and Geography of Herodotus, from the most Ancient Sources of information; and embodying the Chief Results, Historical and Ethnographical, which have been obtained in the progress of Cuneiform and Hieroglyphical Discovery.

By GEORGE RAWLINSON, M. A.,
Assisted by Col. Sir HENRY RAWLINSON and Sir J. WILKINSON.

WITH MAPS AND ILLUSTRATIONS.

4 Vols. 8vo. Price \$25 50 each.

From the Boston Recorder.

"Every scholar knows the value of Herodotus, the 'Father of History,' and that his writings afford an admirable text for commentary upon the remotest historical antiquity. The version by Rawlinson is excellent and the illustrated matter rare and rich, beyond precedent in the editions of Herodotus."

From the Century.

"The work will doubtless long hold the place of the Standard Translation of the first of Greek historians."

From the Detroit Advertiser.

"Next to the Iliad and the Odyssey, Herodotus has been pronounced the greatest effort of Greek literary genius—the one the perfection of epic poetry, the other the perfection of epic prose. The notes throw much light upon the text, and make what might otherwise seem obscure to the modern reader clear and intelligible."

From the Rochester Democrat.

"It is now universally admitted that there is no more reliable authority in all matters where the truth was attainable to a sincere lover of knowledge, and to the most patient and laborious research. Hence it has never been possible for his writings to grow old. Though published nearly twenty-three centuries ago, they are as fascinating to the reader now as they were when the elegant Greek mind bestowed upon the nine books, of which they are composed, the names of the nine muses."

From the Cincinnati Press.

"The labors of Professor Rawlinson—clearing up, explaining, correcting, marking distinctly the line between the reliable and the doubtful, and over all pouring a flood of interesting and valuable learning—make up a compound, which, to the scholar or the general reader, will want none of the elements of interest or instruction."

From the Universalist Quarterly.

"Modern scholarship has produced no works of a more inviting nature than this. Especially welcome will it prove to those who would lay a broad and secure foundation for historical learning."

From the Charleston Christian Advocate.

"We read the book with wonder. It is like a fable to see so closely connected and probable a history discombed after a burial of ages, as that is, by which Herodotus is here illustrated or explained, corrected or corroborated. What is especially gratifying in this new connection between sacred and profane history, is to find that the Hebrew record is perfectly reliable when narrating facts where the history of that people touched that of other nations."

D. A. & C. have Just Published,

REMINISCENCES OF A GENERAL OFFICER OF ZOUAVES. By Gen. Cler. Translated from the French. 1 vol. 12mo. Cloth, \$1.

THE EBONY IDOL. By a Lady of New England. 1 vol. 12mo. Illustrated. Price, \$1.

LIFE OF WILLIAM T. PORTER. By Francis Brinley. 1 vol. 12mo. Price, \$1.

A RUN THROUGH EUROPE. By Erasmus C. Bene dict. 1 vol. 12mo. Price \$1 25.

WHAT MAY BE LEARNED FROM A TREE. By Harland Condit. 1 vol. 8vo. Price \$1.

BERTHA PERCY; or, L'ESPÉRANCE. By Margaret Field. 1 vol. 12mo. Price, \$1 25.

FLORENCE NIGHTINGALE'S NOTES ON NURSING. 1 vol. 12mo. Cloth. Price, 25 cents; Paper covers, 15 cents.

THE PHYSIOLOGY OF COMMON LIFE. By George Henry Lewes. 2 vols. 12mo. Price, \$2.

DR. OLDMAN AT GREYSTONES, AND HIS TALK THERE. Price \$1.

THE MOUNT VERNON PAPERS. By Edward Everett. 1 vol. 12mo. Price, \$1 25.

VOYAGE DOWN THE AMOOR: with a Journey through Siberia, and Incidental Notes of Manchuria, Kamtschatka, and Japan. By Perry McDonough Collins. 1 vol. 12mo. Cloth.

SEEDS! SEEDS!

FRESH SHAKE SEEDS, OF LAST YEARS growth and warranted. Also, Spring Wheat, Sweet Potatoes of several kinds, King Philip, Flour, Dutton Night Rowed and Sweet Corn, Timothy, Clover, Barley Peas, &c., &c.

108 Woodward Ave. Detroit.

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.
Publication Office, 130 Jefferson Avenue.
DETROIT, MICHIGAN.

S. FOLSON,
WOOL DEALER,
90 Woodward Avenue,
DETROIT MICHIGAN.

THE MARKETS.

Broadstuffs.

Produce under the extreme dullness continues to decline. There are here but few sales, and those are made solely in small parcels for home consumption. Flour ranges from \$4.25 to \$4.50 for red wheat samples, and from \$4.50 to \$4.75 for good brands of extra. Wheat is bought by the millers when offered at 80¢ to 85¢ for red, and from 85¢ to 90¢ for white. The receipts are very light. We note that the New York market has also declined during the past week owing to the advance on freight in vessels going to Europe and also on account of the low rate of exchange. White western wheat is quoted at \$1.20, and Kentucky white at \$1.35. Choice samples of good white wheat however would command something more if put on market, but those who have that kind of wheat on hand, hold it. We can only repeat that we do not believe farmers can possibly lose by holding on to their wheat at present; with the approach of the opening of navigation the seaboard will be almost cleared of the immense supply which it now has on hand. The English markets show a decline especially in foreign grain arising from the fact that the home grain is now getting into better condition and more ready for the miller. The steamer of the past week brings reports of a considerable decline in rates. This also affects the views of shippers in the New York market, and has aided to cause the depression.

The prices of other produce remain steady as quoted below.

Extra white wheat flour @ 45¢	5.25
Superfine flour @ 45¢	5.25
White wheat, extra, @ 45¢	1.05
White wheat, No. 1, @ 45¢	0.85
Red wheat, No. 1, @ 45¢	0.85
Corn in the street, bush @ 45¢	0.40
Corn in store, bush @ 45¢	0.44
Oats, bush @ 45¢	0.21
Rye, bush @ 45¢	0.25
Barley, @ 45¢	1.12
Buckwheat flour @ 100 lbs @ 45¢	1.75
Corn meal, @ 45¢	1.06
Bran, @ 45¢	0.90
Course middling @ 45¢	0.10
Butter, fresh roll @ 45¢	0.15
Butter in firkin per lb @ 45¢	0.12
Eggs, @ 45¢	0.18
Potatoes, Meshannocks @ 45¢	0.30
Common sorts @ 45¢	0.25
Beans, @ 45¢	0.65
Apples, green, best quality @ 45¢	0.35
2d quality @ 45¢	0.30
Clover seed, @ 45¢	4.00
Timothy seed, per bush @ 45¢	3.50
Hay, timothy, @ 45¢	8.00
Hay, marsh, @ 45¢	5.00

Live Stock, &c.

The live stock market does not seem to give much promise here of better times. There is a full supply of medium beef now in market, that sells from 3¢ to 4¢ dressed. The supply of poultry, and of dressed meats does not leave much business for the regular butchers. Smith bought only six head this week, at a price less than three cents live weight. The price of hides has gone down 8¢ per cent, the price now paid being only 4¢, when last week 6¢ 6/10 was paid. This makes quite a difference to the dealers in cattle as it knocks off a dollar to a dollar and a half to every animal. Calves remain as quoted last week, the supply of dressed mutton being very good, and carcasses selling at 4¢ to 4 1/2¢.

Hogs are coming in very freely from the country, and the price remains steady though not at \$4.75 to \$5.00, only the best heavy dressed hogs bringing the latter price. Lard remains firm at 12¢. Tallow is 6¢. Sheep pelts are very dull of sale, we saw a lot of very prime ones that would probably yield each two pounds of pulled wool or more, sold at \$1. The range is now from 35¢ up according to quality.

The New York market is paying fair rates for prime cattle, and these kind are readily sold at 95¢ for estimated weight. The receipts of inferior cattle are far beyond the wants of the market, and consequently the prices given have a wide range, from 5¢ to 35¢. Estimates seems to include everything saleable. Mutton is in fair demand, and brings last week's prices, which was 6¢ dressed. Swine is crowding into the New York market very fast, the number reported being 11,000, with dull sales at 4¢ to 5¢ live weight.

Mr. Heath has just returned from the east, and informs us that last week's Albany and New York Market was the worst of the year. It is almost impossible to do business without losing money, which all causes to the benefit of the brokers.

We note some purchases of wool the past week reaching to about 8000 pounds of pulled at 40 cents. But the buyer says he could not do as well by any lots of the same quality. At the east, business is depressed, and transactions are very light.

HERRING'S PATENT

Fire and Burglar-Proof Safes,

With HALL'S PATENT POWDER-PROOF LOCKS

HAVE NEVER FAILED

IN MORE THAN 300 DISASTROUS FIRES.

The Safest and Best Safe in Use.

Delivered at any Railroad Station in the United States,

or Canada, at the very lowest rates, by

JAMES G. DUDLEY, Sole Agent,

44-ly at 93 Main St., Buffalo, N. Y.

INGERSOLL'S PATENT

PORTABLE PRESS.

FOR BALING HAY, Rags, Wool, Broom Corn, &c.

Simple, powerful and efficient—is believed to be

the best in use. For particulars send for circulars.

JAMES G. DUDLEY

81-4f 93 Main St., Buffalo, N. Y.

CALIFORNIA COTTAGE FARM

NOT SOLD YET.

ONE of the best improved farms in Southern Michigan

For Sale, with fine buildings, large orchards, and

the best of improvements in everything, lying one

half mile from the railroad depot at Jonesville, Hills-

dale county. For further particulars enquire at the

MICHIGAN FARMER office, or of the subscriber on the

premises.

Jonesville, Sept. 25, 1890. 39-4f

THE WETHERFIELD SEED SOWER

FOR SALE AT

14 PENFIELD'S, 108 Woodward Avenue.

CUMMINGS' PATENT

HAY, STRAW AND STALK CUTTER.

The best in use, by hand or horse power, at

PENFIELD'S AGENT WAREHOUSE.

Detrol, Dec. 20, 1890. 38-4f

STOCK BREEDERS' COLUMN.

FOR SALE OR EXCHANGE

FOR OTHER STOCK,

The Thoroughbred Bull Baron Balco.

BARON BALCO was four years old on the 28th of

July, 1890.

Sire, Captain Balco, (Imported) 1816 Am. H. B.

Dam, Fann by Brutus, 285 Am. H. B.

g. dam Pigeon by Andes, 215 Am. H. B.

g. dam Roan Pigeon by Grazer (Imported) E. H. B.

g. dam Roan Pigeon by Reformer 2118 Am. H. B.

g. dam Flower by Mohamk (4492) E. H. B.

g. dam Beauty by Imported Count (1892),

E. H. B.

Reference as to authenticity of the above pedigree

may be made to Andrew Y. Moore, Esq., former Presi-

dent of Michigan State Ag. Society, Dr. M. Freeman of

Schoolcraft, and James B. Crippen, Esq., of Greater,

Branch county, Mich. W. M. S. H. WELTON,

48-3m Grand Rapids, Mich.

VALUABLE HORSE STOCK

Offered at Private Sale.

THE subscriber having been engaged in breeding

from the most valuable strains of thorough bred

and full bred trotting and road horses for several years,

is now prepared to dispose of a number of his young stock

on liberal terms, and he calls the attention of those who

desire to procure animals for breeding to the colts he of-

fers for sale. An opportunity is now given to breeders

to make a selection from stock bred from the best horses

that have ever been introduced into Michigan or the

western States. The list comprises colts from ten

months to five years old, of thoroughbred, half breed

quarter bred, and full bred trotting and road horses

both sides. Amongst them are some of the closest bred

and fullest blooded Messenger stallion colts to be found any

where, also colts bred from the stock of Glencoe, Bos-

ton, Imported Stoneplover, Abdallah, Vermont Black

Hawk and Long Island Black Hawk, all of them re-

markable for size, style and action.

For further particulars address

E. N. WILCOCK,

April 4th, 1890. 144f Detroit, Mich.

HORSEMEN!

AS I wish to leave this country, I offer some great bar-

gains in stock, to wit: one of the finest JACKS in

the States, 14 hands less 1/2 inch in height, seven years

old, weighing between eight and nine hundred pounds,

and for spirit and beauty cannot be excelled; has served

between 50 and 60 mares, this season, all of which to all

appearance are with foal, save in one or two cases. I

will sell cheap for cash, or on one and two years time,

secured by mortgage on real estate at ten per cent. In

many places this Jack by his services will pay from \$300

to \$1000 per year.

Also, for sale, one three year old STALLION COLT,

sired by Kentucky Grey Eagle, dam the celebrated

Fanny Booker, out of Kenyon Bachus, he by old Bachus.

Address soon, Box 5, Davisburg, Oakland Co., 39-4f

HOWE'S IMPROVED

HAY OR CATTLE SCALES!

THE BEST IN USE.

FIRST PREMIUM OVER FAIRBANKS, at Vermont

State Fair, '87 and '88.

FIRST PREMIUM and no competition in 1889.

FIRST PREMIUM at 18 different State Fairs.

SILVER & BRONZE MEDALS at American Institute

Fair, N. Y., 1889.

Howe's Scales for ALL USES, have Great Simplicity

Wonderful Accuracy.

Require no Pit: may be set on top of the ground, or

on a barn floor, and easily removed.

No Check Rod: No Friction on Knife Edges; all

friction received on Balls. Weigh truly by not level.

Delivered at any Railroad Station in the United States

or Canada, set up, and warranted to give entire satis-

faction or taken back.

Send for Circulars and price lists, with account of

trial of Scales between Howe and Fairbanks, at Ver-

mont State Fair, 1889. JAMES G. DUDLEY,

General Western Agent, 93 Main St.,

Buffalo, N. Y. 44-ly

PROF. L. MILLER'S

HAIR INVIGORATOR,

An Effective, Safe and Economical

Compound,

FOR RESTORING GRAY HAIR

To its original color without dyeing, and preventing the

Hair from turning gray.

FOR PREVENTING BALDNESS,

And curing it, when there is the least particle of vitality

or reenerative energy remaining.

FOR REMOVING SCURF AND DANDRUFF,

And all cutaneous affections of the Scalp.

FOR BEAUTIFYING THE HAIR,

Imparting to it an unequalled gloss and brilliancy, mak-

ing it soft and silky in its texture, and causing it to curl

readily.

A great celebrity and increasing demand for this

unequalled preparation, convinces the proprietor that

one trial only is necessary to satisfy a discerning public

of its superior qualities over any other preparation in

use. It cleanses the head and scalp from dandruff and

other cutaneous diseases, causing the hair to grow lux-

uriantly, giving it a rich soft, glossy and flexible ap-

pearance, and also where the hair is loosening and thin-

ning, it will give strength and vigor to the roots and re-

store the growth to those parts which have become bald,

causing it to yield a fresh covering of hair.

There are hundreds of ladies and gentlemen in New

York who have had their hair restored by the use of this

Invigorator, when all other preparations had failed. L.

M. has in his possession letters from persons testifying

to the above facts, from persons of the highest respect-

ability. It will effectually prevent the hair from turn-

ing until the latest period of life; and in cases where the

hair has already changed its color, the use of the Invi-

gorator will with certainty restore it to its original hue,

giving it a dark glossy appearance. As a perfume for

the toilet, and a Hair Restorative it is particularly recom-

ended, having an agreeable fragrance; and the great

facilities it affords in dressing the hair, which when

moist with the Invigorator, can be dressed in any re-

quired form so as to preserve its place, whether plain or

in curls; hence the great demand for it by the ladies as

a standard toilet article which none ought to be without,

as the price places it within the reach of all, being

Only Twenty-Five Cents

per bottle, to be had of all respectable Druggists and

Perfumers.

L. MILLER would call the attention of Parents and

Guardians to the use of his Invigorator, in cases where

the children's hair inclines to be weak. The use of it

lays the foundation of a good head of hair, as it re-

moves any impurities that may have become connected

with the scalp, the removal of which is necessary both

for the health of the child, and the future appearance of

its Hair.

CAUTION.—None genuine without the fac-simile

LOUIS MILLER being on the outer wrapper; also L.

MILLER'S HAIR INVIGORATOR, N. Y., blown in the

glass.

Wholesale Depot, 56 Day Street, and sold by all the

principal Merchants and Druggists throughout the

world.

I also desire to present to the American Public my

New and Improved Instantaneous

LIQUID HAIR DYE

which after years of scientific experimenting I have

brought to perfection. It dyes Black or Brown instan-

tly without injury to the hair or skin, warranted the best

article of the kind in existence.

PRICE, ONLY 50 CENTS.

Depot, 56 Day Street, New York.

44-ly

FARM FOR SALE.

OFFER FOR SALE a farm consisting of

Four Hundred and Seventy Acres,

In the town of Cannon, Kent County, Michigan. Two

hundred and fifty acres of this Farm are improved, and

all under good fence. There are two good barns, a

good frame dwelling house, and a good orchard. The

Farm is well watered by spring brooks; soil oak open-

ing of the best quality, and lies within a mile of Lap-

hamville, a depot station on the line of the Railroad

from Grand Rapids to Kalamazoo. Price low and terms

reasonable. Apply to

H. F. FORBES,

39-3m Cannon, Kent Co., Mich.

AYER'S CHERRY PECTORAL

has won for itself such a renown for the cure of every

variety of Throat and Lung Complaint, that it is entire-

ly unnecessary for us to recount the evidence of its

virtues, wherever it has been employed. As it has long

been in constant use throughout this section, we need

not do more than assure the people its quality is kept

up to the best it ever has been, and that it may be relied